Photography A series of the s

Any Glamour Today? by Paul Garrison A Folio of New Prints by Man Ray χι



Send your soldier "Good Pictures"... of the old familiar scenes... the home place, the best girl, the old fishin' hole, sister Mary's new baby, the puppy now a dog, the cabin up the river... all the happy scenes of home sweet home. That's what counts a thousand miles from nowhere.

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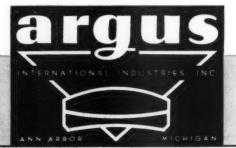
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KEEP YOUR EYE ON ANSCO-

Photography

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Cover by E. Carter Perkins

Articles at Work For Coming Issues

M. F. AGHA, who as art director of Vogue Magazine was a national fountain head of sparkling ideas, is doing four articles. The first deals with studio lighting. Agha writes us: "I have a system which I always recommend to people who would like to try their hand with Mazdas, Photofloods or flash. It does not involve any preconceived aesthetic scheme, but merely is a sequence in which the lights should be arranged, and is therefore applicable to any kind of photography; dramatic, soft, high key, low key, Rembrandt, Baron de Mayer or what have you, including Mortensen (God forbid!). There are five points in my system and I'd like to illustrate them with pen and ink drawings." Mr. Agha—the stage is yours.

FIVE MAJOR SALONS, in collaboration with the article "Technique to Work" in this issue, will invite your submissions to their salons especially if your work ties in with the general thesis suggested. The title of this invitation is "You're Welcome Here." Planned for December.

EDITORIAL ASSOCIATES: John Hutchins, A. R. P. S., Gorge Piatt Lynes, L. Moholay-Nagy, Audrey Goldsmith.
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The Last Word

A P.S.A. Never Forgets

Sir

In 1937, while living in Carrollton, Ky., I took my first aerial photograph, taken from a Taylor Cub. The camera was a "Kodak 35," using Agfa Finapan film and a K2 filter. This new experience was quite thrilling to me, and as a result of that "first" aerial photo—I got the "bug"—and took more than 200 such photos that year, of Carrollton and the neighboring towns and cities.



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"Looking down from a Navy blimp . . . "

I have been a U. S. Navy Photographer since August, 1942, and have taken hundreds of aerial photos—but with cameras quite a bit larger than my old "Kodak 35," and definitely more complicated, both in operating and handling. The enclosed photo, titled "On Patrol," is by far the best one I have taken since coming into the Navy—probably due to the fact it was not taken on assignment. I was flying in one of the Navy Blimps, and had just finishing taking pictures for my assignment and we were almost on top of the base, when we approached this ship. Having taken all the exposures but one, I thought what the hell, so I leaned out the window of the Blimp's gondola and took the picture just as we passed overhead. This was taken with a Fairchild F 56 Aerial Camera, at about 4:30 P. M. The exposure was 1/150 second at f11 using a minus Blue filter, and S. S. Aero Pan film.

WARREN SIMMONS, N. A. S., Cape May, N. J.

Photo Market

Sir:

The International Salt Company, Inc., will consider for purchase photographs showing snow removal methods employed by cities, towns and states where rock salt is used to help clear roads and streets of snow and ice. Five dollars (\$5)

[6]

will be paid for each photograph accepted. They should be 5x7, or larger, suitable for reproduction.

INTERNATIONAL SALT Co., Inc.,
Advertising Department,
Scranton 2, Pa.

Sir:

By all means, let's have more articles, such as that on filters by Gus Wolfman, September, 1943. For a beginner, like myself, they are very instructive and help me to obtain a basic form of knowledge in the elements of photography. Thanks again.

ALDEN DRYDEN, 607 Falconer St., Jamestown, N. Y.

 Wolfman is doing a series. The next, on choosing paper, appears in November.—ED.

Inertia Overcome

Sir:

I have read your comments with great and amused interest—amused in a most kindly way. You see I was born a hardened sinner and a soft streak has developed in my old age. I like what you say about Camera Work overcoming a certain inertia in you.

Alfred Stieglitz,
An American Place,
509 Madison Ave.,
New York City.

 Readers who can lay their hands upon copies of "Camera Work" published by Grand Old Man Stieglitz from 1903-12 will find it a powerful aid in helping them "see" an improved goal for their own work.—ED.

". . . Something to Criticize"

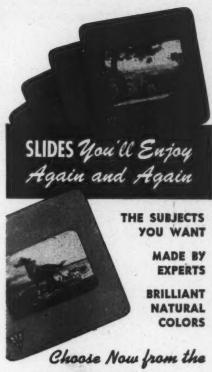
A person by the name of Nancy Newhall, mentioned in an article in your recent issue, and written by W. A. Woodbury, would do herself a world of good to go out and take a course or two in photography under Mr. William Mortensen. And if what he taught her "sunk in" she would then be more qualified to criticize Mr. Mortensen's work. I wonder if Nancy Newhall knows that Mr. Mortensen has a book of photographs in the "Vatican Library"? And I wonder if Nancy Newhall knows that Mr. Mortensen, if asked for one of his pictures by the N.Y. Modern Museum of Modern Art, would probably turn them down flat. Furthermore, he would be justified in doing so!

If Mr. Mortensen did even one half as much work on his prints as the average photographer attempts to do on both his negatives and prints, Nancy Newhall and a lot of other people would really have something to criticize. Intelligence and a good sound photographic education is what Mr. Mortensen makes his pictures with.

FREDERIC SHAW,

FREDERIC SHAW, 115 Newbury St., Boston 16, Mass.

 We still think Mortensen's pictures are preoccupied with undressing lovely ladies for the delectation of the mind's eye.—ED



LIBRARY OF KODACHROMES

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years in producing war materiel.

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Ilex Optical Co., Rochester, New York

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OPTICAL INSTRUMENTS

BUY WAR STAMP



What are flash bulbs doing in wartime?

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"How is work going on M-4's?"

One photograph may provide the answers that would take pages of written reports. So, on many types of war work, Uncle Sam now asks for photographic progress reports.

Result: another job of war reporting on which G-E flash bulbs lend a hand. For flash means quicker set-ups, less interference with work... and plenty of light for crisp, clear pictures.

Of course G-E flash bulbs have other wartime jobs, too. Chief of them all is to help Army, Navy and Press photographers get better pictures every time. We're proud that you share with us in all these jobs...through the flash bulbs you've given up.

Today our sales of photo lamps are restricted. Tomorrow, after the war, dependable G-E Mazda Photoglash and Photoslood lamps will be with you again.

Meastime, if you are an essential flash user (AA-4 priority or higher) you can help conserve critical material and transportation space by switching to G-E Midgets on many a shot. For they use less space and material. And you'll find they meet over 95% of flash needs.

Hear the General Electric radio programs: "The Hour of Charm", Sunday 10 p. m. EWT, NBC; "The World Today" news every weekday 6:45 p. m. EWT, CBS.

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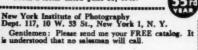
"I still look back to my course as one of life's most enjoyable experiences. Your instruction was largely instrumental in my securing a trip to British East Africa with a scientific expedition. I think I can say in all modesty that I am recognized today as one of the country's best animal photographers—and the pictures I take of my work as a tax dermist has furthered my security in that compaction. have furthered my reputation in that connection, as well. I have good reason to be thankful that I am a graduate of New York Institute."

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New York Institute of Photography, Dept. 117, 10 West 33 Street, New York I, N. Y.

*From a letter dated June 30, 1943.



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Error Sir:

In reference your "Addition to Hypo Alum Gold Sepia Process," page 6, August MINICAM just received, you have a mistake in your for-mula, which I have seen too many times in photographic magazines.

This is the abbreviation "g" for gram. If you will take the trouble to look up the official abbreviation you will find it should always be written "Gm.," or with a capitol "G". Thus, Gm., not gm. or g. In the apothecaries system

grain is written gr., or with a small g.

I have seen this error many times in such a fine magazine, which is read by many classes of professions who know better.

J. HOBART JENKINS, Mounds, Ill.

Local Boy Makes Good

I received your letter and check for publication of my picture "Little Minister". I wish I could put into words how happy it made me feel. Within the next couple of months my induction into the armed forces is imminent. had two goals set for myself before going into the army. One was, to hang at least one picture in a salon, the other, to have one of my pictures published in a national magazine. realized both goals, thanks to you for making at least half come true. In all probability this has changed the entire course of my life. The mere fact that someone else (strangers) likes my work is a wonderful impetus to future endeavors. I've had many pictures published locally, but it isn't the same. I might add with confidence that the general run of my pictures have improved since the publication of the August issue of MINICAM.

I live in the heart of the anthracite coal mines, born and raised here (thirty-six years). I have over a thousand dollars invested in photographic equipment! Just another amateur!
GEORGE V. WINTERSTEIN, JR.,

719 Electric Street Scranton 9, Pa.

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Scabce Photographers

Mac is back in town.

Ten months ago he left boot camp and shipped out as photographer first class in a Seabee montingent bound for the South Pacific. As photographer for a metropolitan daily Mac thought he had seen everything. But the past ten months adds another chapter to his book.

Two campaign ribbons are on his blouse, a small gold star on one. He hasn't changed much. A siege of dengue fever took off a few pounds. A more serious look wreaths his face. But he brought back a story that has changed the minds of his old gang . . . on what many sailors with a camera on the sleeve have been doing the past twenty-three months.

If you've complained once in a while about the stuffiness of your corner closet darkroom, it can't compare with the improvised quarters set up in a three by six space between the barber shop and the generating plant of a tropical island Seabee camp with a tropical sun beating down on it.



Any soldier back from a fighting front can tell you. He may not call it "morale"... that's just a ten-buck word for the lift he felt when he saw familiar movie faces on a screen two thousand miles from home.

His officers know that feeling. They know how valuable it is in winning battles. That's why Filmosound Projectors travel with the troops wherever there's a job of fighting to be done. That's why Filmosound Library sends so many full length Hollywood features to the fighting fronts.



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If your enlarger bulb is beginning to get black along one side and you begin to fret about its inefficiency, how would you like to make a blow-up with current from your light source varying from 60-cycles to 80-cycles and giving you no advance notice of the switch?

In the tropical islands of the South Pacific, the dankness of the jungle starts rust on metal parts within four days, loosen any kind of glue that holds the finest wooden box together, peels off leather trim with the completeness of boiling water on the emulsion side of a negative. It's a weekly chore to dismantle your camera completely, remove all signs of rust and then put it back together again. It's a religious rite to see to it that all spare lenses, filters and other attachments are wrapped in waterproof coverings except for the brief time they are in use. Failure to do this has caused many a fine Tessar to become five separate mensicus lenses.

Roll film cameras are out in the humid air of the tropics. The dampness will virtually cement the paper backing to the film around the edges so that resulting prints will have a deep black border with a handsome deckle edge inside the picture.

inside the picture.

But all the dampness, the humidity and the heat of the bases about the equator failed to break down the efficiency of the paper, the film and the chemicals the Navy has given its men to work with. Neither have they dampened the determination of the men to do the job they have been assigned.

These Seabee photographers are not out to produce salon prints. They are not permitted to bring home with them any of the shots they are making daily. Seldom will their work reach the front pages of the metropolitan newspapers or the picture and news magazines.

Theirs are the record pictures that will find their way into the official archives of World War II as documentary evidence that when America became aroused it rolled up its sleeves and went to work with a vengence.

M. A. WOODBURY, 538 Northwest 34th Street, Oklahoma City 3, Okla.

Eastman's Work on High Speed Cameras

Sir:

We have read your article on High Speed Motion Picture Photography with a great deal of interest.

We realize that an article of this length cannot hope to cover completely the many efforts put forth in attaining high speed motion picturs. For your information, we may add that a camera similar to the one shown as Figure 7 also was built in England and used extensively by Vickers to study behavior of explosives and armor-piercing shells. If our memory serves us right, this was as early as 1930. The weight

(Continued to page 37)



INCREDIBLE number of "things" go into the making of a successful bombing mission, . Among those the eye can see are fighter planes used to "eliminate" enemy interceptors. Playing their part, too, and no less important are many things the eye cannot see. For instance, the photographic chemicals used in the processing of reconnaissance pictures-particularly in the tropics under all conditions. Vital information for the day's actions depends on the clarity and accuracy with which details are revealed.

Fink-Roselieve is proud to be compounding and packing these "chemical bombsights" for the U. S. Army Air Force as part of an overall F-R production serving the U.S. Signal Corp., U. S. Medical Corp., U. S. Navy and U. S. Marines as well as essential industry on priority order.

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KEEP ON BUYING U. S. WAR BONDS AND STAMPS.

Any Glamour Today?



COLLEEN Mitchel coming into Paul Garrison's studio on Sunset Boulevard in Hollywood. She wants to be an actress so her agent told her to have some glamour photographs made.

By Paul Garrison

OLLEEN MITCHELL came to my studio, because her agent wanted her to have glamour pictures. While these pictures do not necessarily show what Miss Mitchell actually looks like, they will create a certain amount of interest and curiosity, and the producers who receive them, may then possibly be tempted to make a test. A fine glamour picture gets a girl in—from there on she is on her own.

film

In return for the free use of glamour pictures many publications will usually give the subject the write-up desired. A clever press agent can by such means bring an obscure, but pretty girl national fame. A classic example of this is what Russell Birdewell did for Jane Russell, who, before ever having appeared on the screen, was known to practically everyone in the country, because of the wide-spread use of her photographs.

Glamour pictures, of the kind that make men whistle, are a business. That's where the glamour photographer comes in, performs his magic, extracts his fee, looks out in the hallway, and hopes he can say "next!"

THE make-up problem on Miss Mitchell was an easy one. She has no particular faults in her facial structure and was given the powder base to apply which I have found best suited. (Elizabeth Arden's All-Day Foundation "Telecast for Blondes." The next best shade of the same product, is "Dark Rosetta Bronze.") This base is applied over the entire face including the lips and should be applied to all exposed areas of skin.



FIRST of all she is told to take all her street make-up off. She then has to put on a dark foundation, suited for panchromatic film. These films will reproduce red as a light grey.



AFTER SHE has applied the basic photographic make-up, final corrections, such as a bit larger mouth, are made for her. A full mouth will help in creating a luscious effect.





STRETCHED OUT on an old mattress, surrounded by some fur and a few yards of satin, she begins to look more like the glamorous woman, which she wants to represent. A single spot from a low angle at her profile, gives the necessary light for a swell shot.

showing in the photograph. Then lipstick (Elizabeth Arden's Screen and Stage No. 22) is applied over the base with a brush. The shape of the mouth should complement the individual face. The lipstick on Miss Mitchell's mouth was applied beyond the natural outlines of the lips in order to give it that full luscious look. The brows have been accentuated and lengthened with eye-brow pencil, which was also used to outline the rim of the eye-lids to give depth to the eyes. Mascara, heavily applied, gives the lashes that long and dreamy look. Lastly, powder is applied. This should be somewhat lighter than the base, in order to give opalescence to the skin. (Elizabeth Arden's Special Mat Fonce Powder.)

As regards the hair, in most cases, I prefer to have the subject wear it hanging down loosely because a woman looking too much like a fashion plate, will

seldom have universal charm.

However, an up hair-do complimented Miss Mitchell's features well and I had her put it up for certain poses.

CLOTHES lend themselves to making effective glamour shots and I have found that a few yards of material are of invaluable help in draping necklines and creating the desired effect. Fabrics such as gold-lamé chiffon, black or white lace, are adaptable for this kind of thing. Furs also have a certain warm and lush feeling about them which makes them effective for glamour shots, especially longhaired furs such as silver or white fox. It is not necessary to suggest any actual neckline-more often it is as effective to give a suggestion of some soft material somewhere in the shot. As much flesh as possible may be exposed and bare shoulders as well as the upper curve



TRYING TO GET her to assume a certain pose, lying on her back, Mr. Garrison finds that she does not seem to get the idea. Doubling in brass the photographer illustrates the point.

of the breast are a great help in getting the necessary effect. It is usually very unattractive to pull down the neckline of a dress, open blouses to their last button, or to shoot from a high angle into the neck of a dress. Such treatment makes a photograph obvious and often vulgar. A complete nude in a photograph can be practically sexless, while a cleverly draped figure or half figure, showing a certain amount of the body, but leaving the rest to the imagination, will be much more glamorous.

You might at times run into difficulties with your models when you attempt to follow my advice about draping. It is natural that the girl posing for such photographs has a feeling of nudity, which your camera actually should not reproduce. Even some actresses with whom I am used to working, often do not realize this. In such cases it is good psychology to gradually lead up to your final shot, by first using whatever clothes your model has brought and then gradually convincing her that, for the effect of the shot, those clothes do not have sufficient appeal. Nothing is as easy to work with or as effective as an evening gown with a well designed neckline, which is sufficiently decolleté and is made of a clinging material. Draping is a makeshift affair and must be handled very carefully to look well.

OOKING into the groundglass and knowing what you can do with your lights, you will often want your subject to sit in a certain way or hold her hands in a certain spot. In such cases I often sit in front of the camera myself, show the girl the exact pose and ask her to duplicate it. This results in laughter on the part of the model since it is ridiculous for a man to try and assume a "glamour pose," but it usually works. Any girl who comes into the studio and undergoes the previously discussed steps of preparation will automatically begin to feel glamorous due to the fact that other people are making a fuss over her, that they are

concerned with her looking just right and that she herself sees the changes being brought about. Then when she is sitting under the lights, surrounded by soft materials, she will fall into the right mood. I have found that it actually helps if the girl is just a bit tired by that time, as it will help to bring about that rather sleepy look. The heat of the lights will make her feel warm and comfortable. It helped in the case of Miss Mitchell that I kept telling her how wonderful she looked. This bit of flattery will usually help a girl to feel that she looks attractive and will create that satisfying feeling of being admired. All this, in combination with the fact that the make-up, the hairdo, and the drape, etc., have actually changed the looks of this girl considerably, accounts for the transition of the girl in Photos No. 1 to the one in Nos. 7 and 8.

I HAVE never believed in diffusing my photographs and strive towards extreme sharpness in each shot. The slightly vague and often attractive feeling, which is usually created by diffusion, can also be achieved by the proper distribution of a liberal amount of deep shadows, which at times go into solid black. After doing a certain amount of work of this type, one develops a feeling for lights and shadows and begins instinctively to work in shadows, which are not supposed to have any detail, while others should carry just enough transparency to make it possible to faintly distinguish the modeling in the shadowed area. I never tolerate an area of light, which does not carry every detail of skin texture. Nothing is more disturbing than to have washed out looking highlights. It makes that part look hard.

I use a 500 watt Frenell spot as a key light at all times. To light up the background any light will do, depending on the effects desired. I do not follow any particular pattern in placing my key light, but change it continuously with each change of pose.



TURNED upside down, the result seems to justify the effort.

[19]



PAUL GARRISON then asks her to put her hair up again. He puts in a touch of color, by adding a few flowers to that severe pompadour.

Glamour effects can only be achieved by the use of FEW lights. The more lit up a picture is, the more life-like and average it becomes. That is why most of the glamour shots you see are low-key, on dark backgrounds with deep shadows and strong high-lights.

To begin with have your subject sit comfortably, preferably against a solid color wall, with her face full on or turned slightly, (actually depending on her best angle) looking into or just by the lens.

Then take ONE light, preferably a spot, and play around with it. Pull it up, down, to the side and watch for the effect. When you feel that you have something you like, watch for your subject's expression in the camera.

When you take this kind of shot, keep a certain amount of space on your negative around the head so that you may later on experiment with cropping your prints. You will find that the picture may become more effective when tilted on its side, or cropped very close.

The reflector appearing in some of the shots is a 2000 W Flood. The reason for its use in the technique shots was to give sufficient detail to the surroundings without sacrificing the actual glamour lighting applied to the subject. My average technical data on a glamour shot is $\frac{1}{2}$ second exposure at f12.5 with a 500 W spot as a key light, Agfa Triple S or Eastman Tri X film, 8x10'' with a Zeiss Apotessar $14\frac{1}{2}''$, printed on Defender Velour black No. 3.

A gramophone will play a helpful part, as it distracts the subject's thoughts from surroundings. Nearly every popular tune has a certain meaning or memory connected with it for the average young girl today, and playing such tunes will create expressions in accordance with such memories as well as the rhythm or feeling of your record. The most difficult thing to get for glamour pictures is the "right expression," as one is trying to express a feeling or mood rather than a happening. It is very easy to make a girl laugh or cry or look as if she was asking a question, but when you tell them to look sexy the result in many cases is rather ridiculous. Even good actresses, girls who have been on the stage or screen for years, will be unable to get the right look into their faces. That is where you have to use psychology. You have to try and make your subject forget her surroundings, make her forget that she is being photographed. It will always help to keep the lips parted and wet, to watch that the look in the eyes is soft and dreamy, rather than hard and realistic. The feeling of these shots should be a tense one in pose and expression. When too relaxed, it brings about a satisfied look that has nothing to do with sex. It must be the feeling of something trickling down one's spine. Only a great deal of patience and picture taking gets final results.

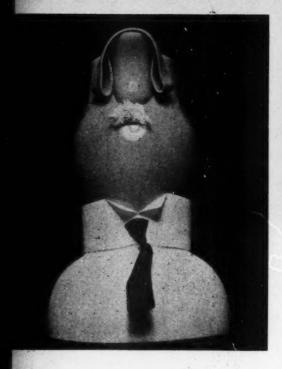
Even then you will often find yourself, with shots that are utterly stupid, as the borderline between a sexy look and a very stupid one, seems extremely narrow.

Though you may have no idea at all of doing professional glamour shots of girls who are looking for a stage job, and need newspaper publicity, you'll find it fun shooting a glamour photo of your wife—and this time she'll cooperate gladly.



WRAPPING an old piece of black lace around her, recreates the basic neckline of a strapless evening gown with the help of a clip from the 5 and 10. This results in a completely different shot, though photographed with the same lighting, against the same white wall as the two others.

[21]





STRATEGY EXPERTS. These fellows work mostly in bars where they analyze the war and find that it is being run wrong. "Just drop a hundred thousand men on Berlin and the Germans'll quit right then and there."



By KASTI RUOHOMAA
from Black Star

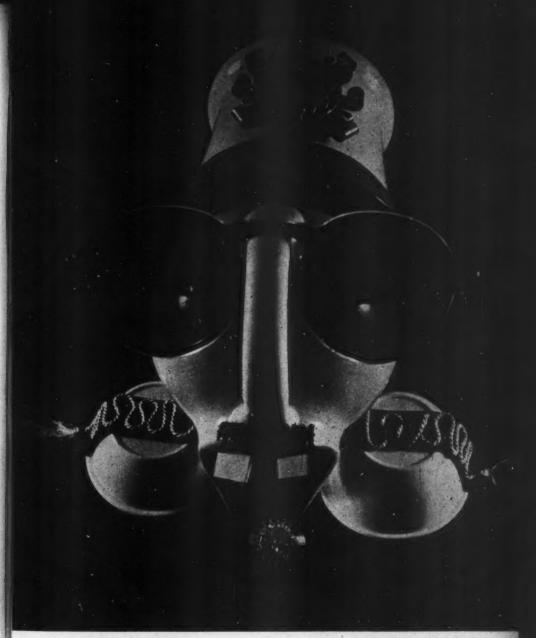
CLOSE PERSONAL FRIEND of Senator Wheeler making an informal speech. He doesn't want to be quoted, but confidentially he stinks.

HESE photo-caricatures were suggested by the steaming and clattering teapot, which makes so much noise in doing so little. The teapot and its associates, the humble cup, saucer, and the cream pitcher, become symbolic carricatures of some people in this wartime world. These are the people who clatter.

I have caricatured, for example, the self centered isolationist type of politician who drapes the flag around himself and screams to the heavens that our country is on the verge of ruins. This is the man who clatters about "foreign entanglements." His patter has the gloss and sheen of a shining piece of kitchen pottery but has little of its usefulness.

These photo-caricatures are made of common ordinary kitchen crockery, they could be broken and thrown away. The men whom they are designed to resemble cannot be similarly treated.

Personification of any object makes it amusing. Fruits and vegetables have frequently been used and tea service things are equally adaptable. Shoes, pocketbooks, buttons, and lamp shades are raw material for an as yet unmade series.



BANZAI THE EMPEROR

By KASTI RUOHOMAA

THE FRAGILE Wedgewood epaulettes that Hirohito sports in this teapot satire are supported, in the rear and out of sight, by "a piece of old jade, a little rice, and some scrap iron from Uncle Samuel." Visit a pottery shop in your community and perhaps you can borrow some amusing pieces in exchange for giving the propreitor a sample print, for his show window, of your results.



By KARI BERGGRAV Royal Norwegian Legation

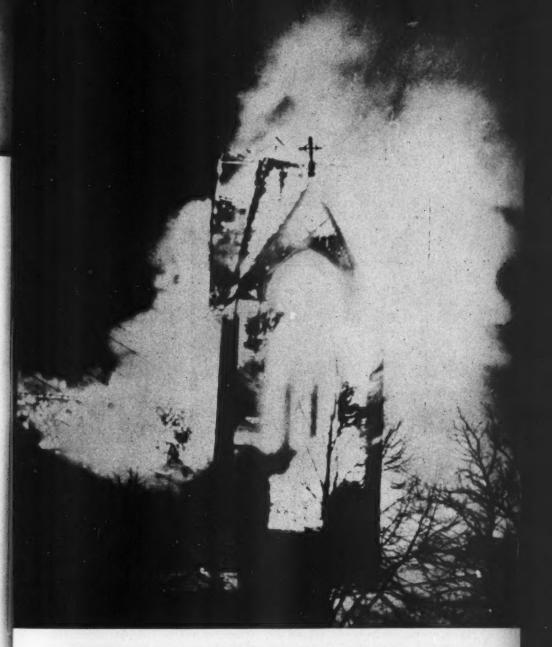
N another world, I was a news photographer on Norway's second largest newspaper, located in Oslo. I did all sorts of photography, from fashion to murders.

In the evening of April 8th, 1940, the sirens in Oslo began to scream. We



thought it was a surprise alert, but knowing that my editors would raise cain if it were the real thing, and I failed to turn up with pictures, I grabbed my Contax and flash bulbs and felt my way along the house walls to a big shelter. I explained carefully that I was going to shoot a couple of bulbs in order not to scare the children. I adjusted the camera by the light of a match and shot the first picture of the Norwegian war. I expected scared, gloomy, harassed expressions on the faces of my shelter companions when I developed the film, but instead I found interested, determined faces.

The Germans captured Oslo, while one hundred and fifty bombers roared overhead and the next day landed paratroops on the airport outside the city. I escaped just before the last road was closed. I had my Contax, a tooth brush, a piece of soap, a package of matches-almost indispensable, because everybody wanted to smoke, and no one had matches—as many flash bulbs as I could carry, as well as thirty rolls of 35mm. film. It was Agfa Isopan Neu film, as fast as Panatomic, but with a much finer grain. I also had some hypo crystals and a pint of developer. It was an English one, Johnson's fine grain developer, and it did the trick in 31/2 minutes with that film. I was lucky to have all this, because I had to develop my films in tents on dark nights, in small caves, on cellar steps, even rolled into my black skirt, and by hand. Seldom did I



WHILE THE fighting was in Molde, Miss Berggrav was ordered by the Norwegian High Command to move into the front lines as official photographer. Above, a Molde church flames as a Nazi target. When bombed out of their houses, the dauntless Norwegians pinned on wrecked doorways, the red, white, and blue flag of Norway.



AFTER THREE days of constant Nazi air raiding, the downtown section of Molde, Norway, went beyond control of the two fire companies. The water system was bombed beyond repair. Note fireman in foreground watching helplessly. Shopkeeper at right is salvaging what he can. The dense smoke was a beacon for the next day's attack, as noise of the burning city drowned out the sound of the oncoming planes.

have a watch, and never a thermometer. My training with that developer and film stretched over so many years, that I knew both time and temperature by judging.

Well out of Oslo, I went to Elverum to find the Government and offer my services. I did not find the Government, but the Germans with the same thought in mind, caught up with me. I remember creeping around a tree, as I heard the planes roaring, while bombs fell on the victims of a "New Order." The wooden frame Norwegian houses burned fiercely while the people, trapped in their cellars, faced a cruel death in the agony of being burned alive or a quick slaughter by

bullets, if they tried to escape. In one house seventeen people were roasted alive. I saw a man run for a wounded horse in his yard—and fall with four bullets through the stomach. His screams mixed with those of the horse. I cannot shut those awful screams out of my memory.

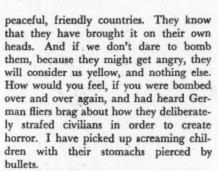
Can I be blamed for getting panicky? It was the first and the last time.

I learned to hate with a cold hatred that brooks no mercy. I do not agree with those who say: "We must not bomb Germany, for that might make them hate us."

Citizens of an occupied country consider that fifth columnist's talk. The Germans know what they have done to the other



FROM THESE wrecked cars (above) Kari Berggrav and her journalist friend Eivind Rasten, rigged up a make shift car to deliver news daily to the men in the front lines. (Right) twenty miles back of the Narvick front. "This was our news office for a week, where we printed our newspaper. I developed negatives in the cellar. When it was bombed we saved our press and a wonderful old necklace I inherited from my grandmother."



I ran away, crying that evening, forgetting for the first and last time in my life the camera around my neck, and tried to forget in sleep what I could not forget—my eyes saw and my ears heard. But I came back a changed person, determined to show the world what had been done to us, and to reveal how German children, whose lives and health we saved by our loving care in our homes after World War One, used their knowledge about the country and our language to come back and kill us. I am determined to use my life to fight German



propaganda and their lies which infect the minds of all people and thus make my contribution to kill this evil illness that harasses the world.

I TOOK forty pictures of Elverum the next morning—a city of bare, smokeless chimneys staring, gaunt, and emptyeyed over the white-hot ruins of a oncebustling city. I joined some of my friends working in the Government's broadcasting station at Hamar. We picked up news via short wave radio from all over the world, and sent it out; we also broadcast the statements of our Government. I was in charge of the children's hour, at which time we tried to give the thousands of evacuated children some substitute for their school work.

After a week we had to pack up the station and evacuate. I was assigned to the Norwegian High Command as its photographer at the front.

We came to Molde, a beautiful little city on Norway's west coast, that had gained a wide reputation as the City of



"AS WE LEFT Molde, I turned my back to the harbor and pointed my camera at the town. Tears were gone. There was only cold, bitter hatred. The German boys that we had fed and housed after the first World War were the ones who sat with the bombadiers to direct them."

the Roses. But this time the roses were made of fire, for the Germans had bombed Molde for two days, leaving the city a blazing inferno. Here I took many pictures through three air raids, all in ten hours. A burning city roars so that you cannot hear the planes coming, and often I learned that enemy aircraft were over head by seeing the houses explode around me.

The most uncomfortable thing about this man-made hell was the heat. Many times I had to protect my face with my camera when I turned to take a picture of the fires.

In the middle of the night we left Molde. The city blazed like a torch, giving light to five German bombers which tried to sink the British cruiser "Glasgow" out in the harbor. On board was King Haakon, the Government, and half of our gold supply, which was taken out of Oslo, even while the Nazis hunted for this vast fortune. Our Norwegian gold supply was much bigger than the German!

On the only quay which the Germans had not yet hit was our gold, which we threw on board a boat. When the scream of a bomb came uncomfortably close, we hid behind cases of asphalt on the quay. We got away through the British mine field and northward to what we hoped would be safety.

In the morning a German plane saw us and dived down, but our little ship quickly fled toward the shore. The bomb hit fifty feet from us, and the next bomb fell in the water close to the shore, drenching us with water. The captain ran the ship aground, and the twenty-five of us jumped for land, trying to find cover on the

barest piece of ground I've ever seen. No trees, no hills, stones as big as a man's head, just empty open land. For twenty minutes the plane strafed us with bullets, finally it sent a shower of forty or fifty fire bombs and thought the job was finished.

They did not come back—proving that the Nazis did not know the gold supply was on board. I had seventeen fire bombs blazing within reach of my hand and I had to jump through them to reach approximate safety. I thought I was the only living person on those hundred square yards where we had fled. I had seen bullets strip the flowers and the grass around me, had been showered with splinters from the stones and covered with mud, and such a lucky escape could happen just once. But German marksmanship got just one crow—in the air. And one man, shot through his leg.

ON the northern front before Narvik we were the winning party. The High Command wanted me to aid in printing a newspaper every day in the front lines, consisting of a short wave news. A journalist and I managed to reach 3300 Norwegian soldiers every day with it.

One Commander in Chief, General Ruge, told me that the soldiers insisted that our little two-page mimeographed paper was worth more to them than food, and we saw how some of them sent couriers for it twenty miles every day. Our press had been with us from Oslo, and was in pretty bad shape after bomb shocks and driving on broken roads, but we put it into shape, and managed to build an automobile from six bombed cars, so that we could bring our paper to our customers.

Returning one day from the front, where we had gone to take pictures, we saw our little village in flames. We saved our equipment before fires reached our house, and then helped to save the Arm's food supply.

The "lotte" who cooked for the officers, had been in the kitchen when the Ger-

mans came. She had been making the icing on a beautiful cake and we knew that she had saved eggs for days for it, and we had even brought her some from a farm fifteen miles away. Eggs were quite scarce, and the cake was an achievement. Cook was determined to finish the cake, come Hell or High Germans. When the first bomb hit the house, she flew through the air to the other wall, but calmly picked herself up, walked over for the cake and marched out of the exploding house.

I found some potatoes, placed them in burning hay balls and learned how to make American baked potatoes. A tin filled with hot water served to boil some dried fruits for me, while I tried to save a heap of oats for the horses. I worked and worked, digging deeper and deeperand finally discovered that a fire bomb had fallen through the oats and was burning at the bottom. The fire was brought under control by smothering it and we sat down, ten soldiers, the journalist and I, to a more or less pleasant dinner at midnight, with the Germans bombing us again for two hours. Close to us an angry Frenchman shot at the planes with a machine gun, and sometimes we had to protect the food from clouds of ashes and

IT IS not always easy to remember that you are in the war to take pictures. So many other things seem so important, and after a while the unusual happenings of a war become ordinary and trivial. You get so used to the things happening around you, that you don't find them worth photographing. In that way I missed many pictures. It is hard to keep your thoughts on your camera when everything is collapsing. You want to salvage everything that seems most important at the moment. only to regret it afterwards.

It's always the little things, or at least what in retrospect appears to be the little things, that we remember. With me, it is the face of a man, and a German, at that.

(Continued on page 85)

RETOUCH

your PRINT



T IS almost impossible to do a good retouching job on a small negative due to the small surface. The solution is to retouch a large glossy print, then rephotograph it. Reduction tends to conceal retouching. If you do not own a copy camera use your enlarger. See the July issue of Minicam "Copy With Your Enlarger." The illustrations here give you a simplified course in the art of retouching. Even without special artistic aptitude you can learn enough to improve photos.

Fig. 1. RETOUCHING TOOLS: white, black, and yellow other opaque water color; two or three good sable brushes that will come to a fine point; a twelve-inch ruler, absorbent cotton, a glass of water and a china slab.

FIG. 2. Fig. 2. USE THE CHINA SLAB for a

permanent palette. Start with white in the first well and mix twelve variations of light grey to black. Adding ochre to each gives a warm tone, like the average photo.

Fig. 3. DIP BRUSH IN WATER and soften up the paint; do not mix too wet. Twirl the surplus paint off on a

piece of scrap paper..

Fig. 4. LEARN TO DRAW a straight line with a ruler and brush. Raise ruler about 1/2" on one edge and slide the brush along, guided by the metal edge and the finger nails.

Always moisten a piece of absorbent cotten in the mouth and rub over spot to be retouched before applying paint. The saliva removes the grease and makes the paint stick. To remove retouching mistakes, twirl some cotton around the end of the brush, moisten in mouth, and wipe out mistake.



instead of the NEGATIVE BY LAIRD WISE

TECHNIQUES

All retouching work can be done without an airbrush by using the following techniques. Practice them and learn where each is most applicable. Conditions vary, a spot on a coat might require a different technique than a like spot on the face. Use the one that will blend in with its surroundings.

- Fig. 5. FLAT TONE. Paint with straight strokes. Bristles should be heavy with paint, but not watery. For use in flat areas as in backgrounds.
- Fig. 6. DRY BRUSH. The wet bristles are pressed down firmly on a scrap paper; strokes are drawn from left to right until bristles are almost dry of paint and spread out in a wedge shape. The brush is then ready to be used on the photograph in the same manner. The result will be similar to shading with a crayon or fine pen. Excellent for making changes on delicate tones such as removing a double chin.
- Fig. 7. STIPPLE. A fine pointed brush is held almost vertical with the photo and the area to be retouched is dotted. By painting the dots from heavy to light, good blending is possible on small round areas, spots, etc.
- Fig. 8. LINE. Single strokes with pointed brush, to be used on narrow, long areas such as wrinkles, eve lines, hair, eyelashes, etc. Note how some of the wrinkles under the eve have been removed and the shadows have been lightened.

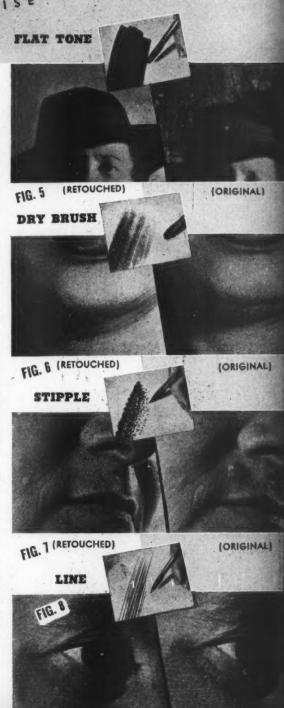




Fig. 9. FLAT TONE used to simplify confusing background of small original size print above. Detail was completely lacking on enlarging and required Dry Brush and Line over most of print. The original negative was lost so a copy was made from the print. Note how hard lines have been avoided where background meets figure, by means of Dry Brush and Line. The right eye was retouched in







AN OLD photo and its retouched copy. The long white tear was filled in with flat paint and blended with dry brush, while the small cracks were painted out with the line technique and then blended. The child's eye and nose were worked in with stipple and line, and the spots on the skirt were gradually built up with dry brush; all strokes follow the folds of the dress. The locket was restored with short lines.



PROCESS YOUR MOVIE FILM AT HOME

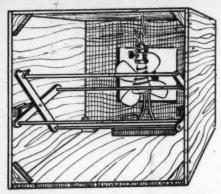
By JOHN GAFILL

ROM scene to screen in two hours at a cost of half a cent per foot of film. This is an every-day experience for many home movie makers.

The key to processing your movie film at home is economical bulk film. Some take the plunge by doing whole reels; others start with test strips and titles. Once the machinery of processing is set-up, the operation becomes efficient.

Short cuts and variations can be worked out by the user when he becomes familiar with the following fundamentals. But first a word about film.

Positive film is popular among some home processors as it may be purchased in bulk, making it economical; it can be used in titling, as it is color blind and will give a sharp contrasty image; it can be reversed to produce a positive as with reversal film; it can be handled with a bright red safe-light, and it may be developed as a negative where prints are desired. Reversal is the type of black and white film most commonly used in 8 and 16mm. cameras, where a single print is sufficient, as it gives better half tones than positive film and can be bought in all degrees of sensitivity. Negative film can be used where one or more prints are desired from an original negative. (It helps to use the same type of film so you



THIS HOMEMADE drier is made from a small electric fan, and a heating element from an electric heater. The drying rack is removable.

learn to know its characteristics.)

To process movie film at home you need a room which may be completely darkened, having a sink with running water, and a work bench or table. The other equipment may be purchased at reasonable cost. It consists of the following:

- 1. A drum or reel supported by a rack.
- 2. Three acid resistant trays.



THIS 16-INCM stovepipe drum is driven by a 1750 r.p.m. motor. The drum speed is geared down to 18 r.p.m. by baby buggy wheels driven by flexible elastic bands, which permit the drum to be held for inspection of the film. Notches allow the drum to be raised when changing solutions. A bell on the side is struck by the revolving wheel.

3. A cage or drum to hold the film while drying. (Not essential but preferred are a heating unit and an electric fan.)

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4. A safe-light.

5. A thermometer.

6. Four two-quart mason jars.

The mason jars are to contain the chemicals used in processing and should be labeled and numbered in the order the chemicals will be used. Formulas for the chemicals will be given as we come to them. The safe-light should have interchangeable colored glass slides as a green light is required with panchromatic and a red light with positive or orthochromatic film. Any panchromatic film with a Weston speed up to 24 may be developed with a green light at a distance of three or four Supersensitive film should be developed in total darkness. Following is a step by step description of one way of processing film by the reversal method.



John Neb

EXCESS MOISTURE is removed with two clean sponges when transferring film from processing drum to drying reel.

Step 1. Now we will go into our darkroom, turn on the safe light, and remove the exposed film from the camera. One end is fastened to the drum with a paper clip attached to a rubber band. Wind the film carefully onto the drum with the emulsion (dull) side out being sure the loops do not overlap. The film stays on the drum throughout processing. Place the drum over a tray, two-thirds full of water.

Step 2. Rotate the film in the water until it becomes thoroughly wet. This is done so the chemicals will act uniformly

and serves to remove any dust or dirt from the reel and film.

- Step 3. Having placed your developer solution which may be Eastman D-72 or Agfa 127, in a tray, rotate the film in this solution for 8 minutes if it is semi-orthochromatic, and 12 minutes if it is panchromatic. The solution should be at a temperature of about 65 degrees.
- **Step 4.** Remove the film from the developer and rotate for five minutes in a tray of clear water. (Running water is best but not essential.)
- **Step 5.** Place the film drum in a tray containing the bleach bath and rotate for five minutes. Here is a simple formula for the bleach bath which will make enough concentrated solution to last for several years:

Dissolve thoroughly, one ounce (by weight) of potassium bichromate in one quart of water. Then mix in, slowly, three and one-half liquid ounces of sulphuric acid. For use add one part of the above to ten parts of water.

- **Step 6.** Until this time the processing has been done with the aid of the safelight. Now turn on a 60-watt electric light placed about three feet from the film for the second exposure. When the film is clear, which may take anywhere from three to ten minutes, another rinse is in order. The light, incidentally, may be left on for the rest of the process.
- Step 7. Wash the film for five minutes and then rotate in a clearing solution. Many methods omit this step, but the clearing solution washes off stains left by the potassium bichromate used in the bleach bath and "clears" the film. A simple formula for a clearing solution is one ounce of sodium sulphite dissolved in one quart of water. Like other chemicals used in the processing of the film, the clearing solution should be used at a temperature of about 65 degrees.
- **Step 8.** After clearing, wash the film for several minutes in fresh water, and then develop it again in the same devel-



FIG. 1

LIGHT SENSITIVE silver-bromide grains in film.

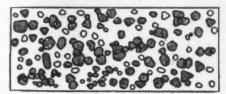


FIG. 2

LIGHT-STRUCK grains form latent image.

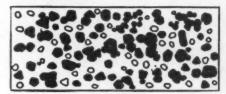


FIG. 3

DEVELOPED grains become black metallic silver.

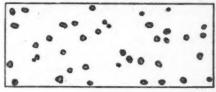


FIG. 4

BLEACHING the silver leaves unexposed silver bromide.

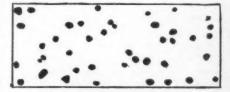


FIG. 5

GRAINS RE-EXPOSED and redeveloped form positive image.



John Nebel IF DESIRED, a draining device may be made by soldering the end of a funnel to hole in tray.

oper solution used in step 3. The time of developing may vary, according to the exposure, but continue until the film becomes black. Again rinse thoroughly.

Step 9. Now is the time to use the hypo or fixing bath. This can be purchased ready for use except for the addition of water. The hypo stops all chemical action, acts as a reducer and hardener and will clear the film. Be careful not to fix the film too long or the image may disappear. Ten minutes is ample.

Step 10. Rotate the film for ten minutes in a tray of clear water. (Use running water if possible.)

Step 11. The developed film may now be removed from the drum and wound onto the drying rack (see illustration) emulsion side out. As the film is wound onto the rack it is run through a clean rubber sponge or chamois held in the fingers to remove any excess water. (Be careful: wet emulsion is easily scratched.)

Step 12. Turn on the heating element and the electric fan in the drier. Using this drier 100 feet of film can be dried in 10 minutes. Another interesting feature of this drier is that shrinkage of the film in drying is allowed by a flexible bar held in place by rubber bands at either end. This permits uniform shrinkage throughout the length of the film.

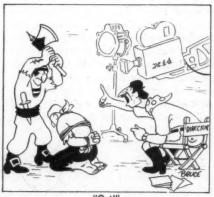
The motor driven drum is of great as-



A RUBBER TUBE carries the liquids to a drain. A cork acts as a stopper.

sistance. While the film is rotating in one solution another may be poured into a second tray ready for use, if the drain illustrated is not employed.

Wind the dry film from the drying rack to a reel. Splice on a foot or so of protection leader. On this write the date, the subject, and any other particulars you want to remember. Thread the film into the projector and summon the family.



'Cut!"

THE LAST WORD

(Continued from page 12)

of the camera was in the neighborhood of a ton, and the drum holding the film was over five feet in diameter. For driving it, a 5-horsepower motor was used. A further investigation into the history of this camera may reveal that it antedated the Japanese development.

Your review of high speed camera design carried out by this company may give some of your readers a misleading impression. We are, therefore, giving you hereafter information on high speed cameras produced by us. The Eastman High Speed Camera, Type I, put on the market in 1932, was a camera with 200 feet capacity. As an "optical compensator" it employed a plane-parallel optical plate. This particular model used, in addition to this rotating plate, a disc-type shutter. The Eastman High Speed Camera, Type II, which came out at approximately the same time, was an adaptation of the Type I Camera for speeds up to 2000 frames per second. IIt also had a film capacity of 200 feet and also used as an "optical compensator" a plane-parallel optical plate. The ends of this plate had opaque blinds which acted similar to a barrel shutter.

Both of these models had an arrangement by which the dial of an electric clock, working in thousandths of seconds, was recorded alongside of the picture and thus provided a record of the elapsed time. The clock itself was not of

our manufacture.

The Eastman High Speed Camera, Type III, announced in 1942, is based on more than fifteen years experience in designing and building compact high speed motion picture cameras using standard 16-mm. film. This Type III Camera also uses an optical plate, the ends of which are shielded so that, in rotating, they act like a barrel shutter. The maximum speed of the Type III model is 3000 frames per second; the film capacity, rolls of 100 feet.

As you correctly pointed out, elapsed time can be determined with less expensive means than a voluminous clock, and for this reason Type III does no longer provide for recording

elapsed time on the film.

It is with considerable hesitancy that we comment on your statements about cameras not made by us. If our memory serves us correctly, the Bell Laboratories claim a maximum speed of 4000 and 8000 frames per second for their

two respective models.

In your comparison of advantages and disadvantages you point out correctly that intermediate film movement produces sharper pictures than continuous film movement. When comparing 16-mm. to 8-mm. size pictures, it should also be stated that 8-mm. film, due to its film area of only one-quarter size, cannot produce as well defined a picture as 16-mm. film. Only when this 4 to 1 reduction in film area is clearly when this 4 to 1 reduction in film area is clearly stated can the sharpness of 8-mm. high speed pictures be termed "remarkable". We would like to suggest that you view a high speed film (8000 frames per second) made on 8-mm. film, to verify its relative sharpness.

High speed photography by intermediate flashes is not limited by the speed of the rotat-

ing prism or cube, since these parts are seldom employed for such a camera. The number of synchronized condensers used or by their ability to recharge quickly enough in order to produce the maximum number of flashes. An installation producing 10,000 flashes per second would, according to the present stage of condenser development, be very large in size and weight.

The fourth disadvantage of this type of high speed work is that it excludes work in light, such as daylight, which may fog the film while it runs past the constantly open film aperture. Cameras using "optical condensers" can be used

outdoors or in well lighted rooms.

Sales-Service Division,
EASTMAN KODAK CO.,
R. K. WAGGERSHAUSER,
Rochester, N. Y.

Gaseous Discharge Lamps

Sir:

I have read your article on high speed motion picture photography and have one criticism to make in regard to its correctness. In the paragraph establishing the disadvantages inherent in the intermittent flash camera, I find this statement: "One is the difficulty of obtaining satisfactory full-tone films in color, a difficulty due to the discontinuous spectrum of the gaseous discharge lamp."

This would be correct with gaseous discharge

lamps operating at low pressures.

Gaseous tubes, however, operating from condenser discharge radiate a duplex spectrum. First—the low pressure line spectrum with which we are familiar; and, second—a continuous spectrum not unlike that given by an incandescent body. This second spectrum, with suitable filters, makes possible the use of such discharge tubes for color work. However, the amount of light needed for color photography is so great that it is not possible at the present to build tubes which would withstand short-interval repeated flashing and still give off sufficient light for color work.

GJON MILI, 6 E. 23rd St., New York.

Vocal Cord Strip Tease

Ci...

I saw the September issue of MINICAM the other day and must say you apparently did a good job on presenting the article on high speed pictures. Fortunately, you didn't do what the editor of American Cinematographer did with one of the illustrations for the article I did for him on the Western Electric Fastex camera, when he ran a strip of the vocal cord pictures with the cords apparently lying on their sides, in violation of all sound medical practice. I've had quite a bit of ragging on that one, and I must admit that, if possible, his presentation makes the photographs look even more pornographic.

FREDERIC LUTHER, Ithaca, New York.

· Honi soit, mes amis, honi soit.-ED.

TECHNIQUE to work...

By STUYVESANT PEABODY

WONDER whether we photographers would find novels as amusing if they were offered to us chiefly on the basis of their technique. Come, buy this book on breeding horses, the advertisements would say. ". . . It is set in ten point Bodoni. The dialogue, indented two picas, begins with but a single quotation mark. . . . Come buy this lovely book and feel its rippled water mark."

The different between a good and a bad

a little stove blacking and a blue toner. Speaking of this very thing, Barbara Morgan, whose dance pictures are so delightful, said she thought some of our very best modern photography appeared in the newspapers, hidden by the ironing out that a newspaper rotary press gives a picture, and flattened further by bad cropping and "60 minutes from negative to zinc engraving."

What is it these newspapermen distill



print is not a matter of technique.

Man has yet to write a sonnet from a comma and a semicolon and a dash. But many a photographer will try to create a pictorial poem on Kodalure with a scalpel, that catches up with us so that we recognize ourselves, while the salon photographer, such as Axel Bahnsen, for example, so frequently deals with beauty as a pleasant photographic exercise instead of a

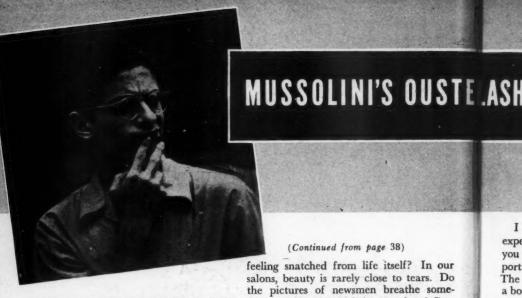


RICKSHA MAN

Chao-Chen Yang

(38)

XUN



* NOTES. BY THE PHOTOGRAPHER OF THESE **FOUR PORTRAITS**

This was really an experiment in Photography for me. Here's why. . . . All my pictures are taken at night.

But happening to be awake when the story broke on Mussolini, and passing Times Square, Broadway and 42nd Street, the Crossroads of the world, and seeing the people looking up on the Electric sign that was flashing the news, I decided to photograph the people.

... I saw that they were not happy, but somewhat surprised. I aimed my camera at the people in broad day light and shot them. It was the first day light picures I had made without Flash bulbs in ages.

I used the back shutter on my Speed Graphic shooting at 1/40 of a second stopped down to F.II. I should have shot at 100 part of a second as the negatives were overtimed, but not enough to spoil the pictures. Most picture editors are not too critical of the technique, its the IDEA that counts with them, so I sold the pictures to the Sunday section of the newspaper P. M. The film used was Eastman Super Pancro Press Type B. . . -By Weegee.

(Continued from page 38)

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feeling snatched from life itself? In our salons, beauty is rarely close to tears. Do the pictures of newsmen breathe something we should include in our salons? Certainly not their print quality or hasty composition, but their sure connection between the fine balance point that separates the savage from the civilized man, the sweet young thing from the bitch. In our salons there is a remoteness from living that no amount of clear, cold beauty, or balance between light and dark compensates for.



ASHES ON BROADWAY

I used to think you could work with an expert and learn a few lighting set-ups and you were all ready to go and could make portraits of anyone as good as the best. The P. T. Barnum of Photography wrote a book that gave me this idea and I wasted months before I learned that each portrait or scene calls for its own individual lighting. There are no arbitrary rules; it is taste and feeling and knowledge of what light will do on a film afterwards.

Perhaps we have become confused by the double talk of photographic literature. We are taught today how to retouch a negative; and tomorrow we learn how to touch up a print. No one goes to any



great length to explain that good photographic technique can be mastered by three hours work a week, by an intelligent and interested worker, in a surprisingly short number of weeks. Our photographic literature gives us ways and means of improving a negative, or saving one that was not properly taken in the first place, instead of urging us to keep our eyes open, to study the world around us, and to make pictures of what we know and what we like.

Photography has made such progress in such a short time, it is no wonder technique gets all the emphasis. There are so many types of films, variations in developers, types of lenses, gradations and surfaces of papers, that we are led off into a maze of wonder as to what we should use, or how Cecil Atwater accomplishes his dextrous results. We keep looking for better developers, improved enlargers, or, in some cases, are moved by the sheer love of collecting lenses and gadgets, fascinated by these articles themselves. Some of us never do come out of this haze.

Atwater is a gentleman and a decent fellow, a complete dyed-in-the-wool-Camera-Clubber. To him the Salons are the important things in this world and

XUM

there is little wrong with them. I listen and try to learn and I realize we are going against types of minds that are going to be hard to wake up or change-maybe they never will change. They live in a world. of their own. I stepped into their world and in my own way have had a hell of a lot of fun. But I think their salons are lousy and frankly get many a laugh at my own successes and just as big a laugh at how many of them feel about me. I doubt if we will ever change many of today's leading salon habitués, or whatever you want to call them, but think we should keep fighting hard to at least get recognition for pictures that are living and real as against the copybook composition, horrible corn and magnolia.

WAS fascinated by photography many years ago, as I have no skill with a pen or paint brush, and I wanted to be able to make pictures - pictures that other people would enjoy looking at. And for many years I struggled, trying to find my way into the shrine where true photographic knowledge might be found. I tried every new developer that I heard of, kept looking for the perfect lens, the fool-proof camera, the self-printing enlarger, (and I can today confound most photographic salesmen with my knowledge of what has been offered to the public along these lines), but my pictures were not getting any better. And then I called on a famous photographer who had some new films he had used for the first time. When I came in he was looking for the manufacturer's instructions that had come in the box of films. When I asked him if he did not have his own developing formulas, he laughed at me. "Don't be silly," he said, "Look in the box and see what the manufacturer recommends and then use that at his recommended time and temperature." That was the first lesson. "Why worry over a lot of formulas when the manufacturer gives them to you in each box of film. The only thing to worry about in photography is your picture. That is what you are after, isn't it?"

Good photography is made to seem

intricate and difficult by Camera Club Big Shots, a lot of simple minded birds who write for the photographic papers and a few others who, having mastered-what in reality is an extremely simple routinewant to make it seem mysterious and difficult to the beginner, so that they may maintain their position of leadership. I am not kidding about this. It has been helped along by photographic merchandisers both in equipment and chemicals, such as Dr. I. O.'s No. 999 Fine Grain Developer for \$1.50 a quart, when Eastman's D-76 is better and infinitely cheaper. Well, the result is that an honest decent guy comes along and wants to make good pictures. He goes to a camera club and learns from each member he contacts the pot dam foolishness of that particular member. He looks to the photographic papers and reads some unintelligible rot-"Develop to Gamma Infinity" for example and not one out of 100 photographers can scientifically explain to you what Gamma is and it makes little difference if you do understand it. Most of the articles are copied from some one else's text book, anyway and not always copied correctly. And so on-but it is a fact.

Michael Roll dropped in here and I knew he is a very excellent technical photographer. I found he has been using One Camera—one developer—and one paper and one film but he used them until, believe me, he can make them talk—and that is all there is to it. He also said that he believed the above was fundamental and that unless a beginner stuck to one camera, one developer, one film, one paper, etc., until he completely understood them he was just wasting his time, and that he was lecturing to Camera Clubs around Detroit on that one subject.

When Yousuf Karsh photographed Churchill in Ottawa and made his portrait in which Churchill's chin sticks out as a challenge to all the world, and his massive shoulders seem to typify the strength of the Great British Empire, I am sure Karsh was not thinking of technique. He was thinking only of Churchill and how to show Churchill as all the Allied World

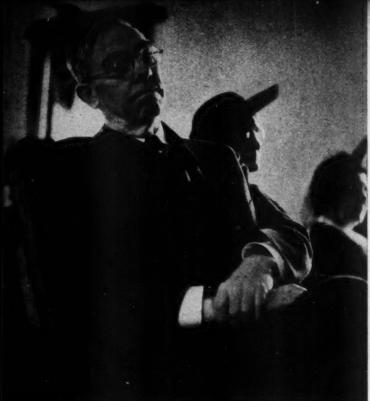


J. P. MORGAN

By COMMANDER EDWARD STEICHEN

ONE OF THE BEST known portraits of our time. Hand in lower right hand corner appears to be holding a blade.

XUM



MEMBERS of the congregation during services at the First Wesleyan Methodist Church.

know and admire him. Forty years before that Steichen did the same thing with Mr. J. P. Morgan. His portrait finally convinced Morgan himself, who hated to be photographed, and even he had to admit that the photograph was himself. We cannot all photograph Churchills and Morgans, but every town and city in America has its own quota of interesting characters and personalities.

THE Leica show, created by Augustus Wolfman several years ago in New York, and attended by 60,000 people, went directly to certain photographers and said to them: "Show us how you feel toward your community or towards certain situations; show us an event in your community, what happened, and how you felt about it."

Rather than hang one picture from one

* THREE PHOTOGRAPHS BY ESTHER BUBLEY, OWI.

Few of us are ever going to make a great picture. But that doesn't take the fun out of photography. We aren't using our cameras so that our works can be shown in a museum a hundred years hence. We use our cameras for fun, for the joy of achievement.

There's no achievement in being stuffy, conversationally or pictorially. We submit these pictures as the kind of work any fair photographer can make and be proud of having made. Each one, shows a part of America, the way one photographer felt at the time she saw it. There is a positive reaction on

the part of the photographer. That's why we like them. The gentleman at church services is our neighbor; he is a man we all know. He is nodding stern approval at the continuity of the immortal soul. The preacher is against sin and so is he. The crusty grande dame at the cafeteria counter is measuring intently the price, the food and her pocketbook. She scans it all levelly. The kids at Sunday School are ourselves twenty, thirty years ago. What's going on down the aisle? That's what they all want to know.

No, these aren't great pictures, and their print quality and composition are weak. But Miss Bubley is a person and when you look at her photographs, you know it. That's why we're for this kind of picture.

photographer, corners of the Leica salon were devoted to panels (series of pictures) that depicted the whole flow of one idea. Here is a thought in photographic salons that can be picked up and used again. a has was the cam such shop streeting Streeting Streeting but the

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A CAFETERIA patron at Washington, D. C.

For instance, one panel was devoted to a hanging-the man before the black hood was put on, after the hood, after the trap was sprung, the spectators, the hangman, the crowd drifting away, and the man who came to sell peanuts. There was another such series-Beale Street in Memphis. The shops, the people, the street fight, the street pick-up, a street pavement sale, the singular architecture of the street; Beale Street as it is-part of our America. One picture, I am afraid, doesn't always do it, but a series of regional photographs after the manner of John S. Candelario's show at Marshall Field's turns in a job. Then, spectators who come to our salon get the chance to see another corner of America as interpreted by John Doe of Sunnyface, Pa., or by you, or by me.

If you are a salon judge and sitting before an easel watching pictures come and go from every corner of America, it is surprisingly difficult to know which pictures came from Maine and which from

(Concluded on page 76)

SUNDAY SCHOOL classes at the First Wesleyan Methodist Church, Washington, D. C.





C. A. BIRCH-FIELD, an amateur, has invented a small tri-color gelatin disc, which acts as a filter, and when black and white films are projected through it, they show up in their original full color. The BIRCH-FIELD discovery grew out of something everyone knew who learned the fundamentals of optics.

BLACK
MAGIC

COLOR MOVIES AT HOME
FROM BLACK AND WHITE
FILM. COLOR PROJECTIONS
FROM BLACK AND WHITE
STILLS...

By PATTY JORDAN

Some time ago a large and reputable New York newspaper carried an ad literally promising the camera fan the blue from the sky.

Just take any black-and-white film, the amazing ad said, project it with the help of an "Iriscope" and your image will appear in natural colors on the screen or the enlarging easel. The sky blue, the rolling valley brown and green, Aunt Cornelia's delicate flesh tones a tender pink.

You will say it can't be done. Very well-founded scientific opinion will be on your side—or rather was.

I went to see the man who promises that he can put back colors where black-and-white photography have taken them out. I was at first skeptical as you would be. With distrust I fingered the strange gadget he calls an "Iriscope," a simple transparent glass disk covered with concentric rings of blue, green and red gelatin as used in Wratten filters.

How could this primitive device that anyone can make himself for a few cents inject color into ordinary photographs?

I examined the film that was to be used

in the demonstration. It was just ordinary panchromatic film with nothing added.

I looked into the projector for some tricky gadget that might have been built in.

"It can't work," I said.

But it did! There was a girl's face, a landscape, a group of people drinking wine, an American flag, and all the colors were there, and as I was to learn, produced by the application of a scientific principle that is simple like all great things.

Meet the miracle man who fathered what he calls the "Iriscope."

His name which it seems will always have a place in the history of photography is C. A. Birch-Field. He is a tall, irongray man with vivid blue eyes twinkling behind iron-rimmed spectacles. He lives in a quaint house in New York's Greenwich Village. His workroom is cluttered up with strange gadgets like an alchemist's study. From the walls smile and lure large paintings of slim cuties in a state of utter undress, for Birch-Field is first and last a painter, and one who has quite a name as

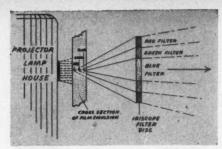


DIAGRAM shows position of the "Iriscope" in the projector. After reading this article, and studying diagram, cut out a piece of cellophane, not much larger than your projector lens, color it as marked—and you're off to a breath taking experiment.



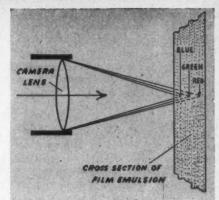
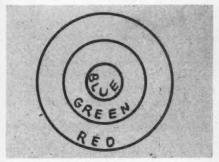


DIAGRAM showing manner in which a camera lens, uncorrected for color, focuses the primary elements of light on a film emulsion. Crosssection of film emulsion is purposely exaggerated to illustrate how the various colors register at different depths.



DRAWING shows a Birch-Field filter, made to size in relation to a hand. The center circle is blue, the next is green, and the outer one is red. Birch-Field has made many different kinds of filters. The one he sent our office had deep blue in the center, light blue in the middle, and red next. When black and white film is projected through this, the projection turns into the same full color that was in the original scene when it was photographed.

a recorder of lovely feminine anatomy.

"As a painter," Birch-Field explains, "I am passionately interested in color and light. That's how I became involved in color photography. Maybe if I weren't a painter I never would have discovered the Iriscope. And," he adds with a smile, "I think it took someone like me who knew very little about physics and chemistry to stumble upon the principle of the 'Iriscope'..."

He says there was one thing that always

vexed him. A colored object produces a black-and-white image on ortho or pan film. All the colors are in there, reduced in various shades of microscopic black or gray or white dots. There must be a way, he figured, to reverse the process, to create those colored light vibrations from the black-and-white image. He spoke to experts about it, but the experts shook their heads and smiled at the candidness of the painter.

One day—some ten years ago—he came

upon a textbook of optics. There was a chapter on chromatic aberration and the behaviour of color-corrected, achromatic, and chromatic lenses.

The first color-corrected lens was constructed in 1757, by the English optician Dolland long before the discovery of pho-

tography.

Dolland was aware of the fact that a lens refracts the rays of different colors to different focal levels. In modern terminology we would say that the wave lengths of different colors vary. Dolland, speaking of this phenomenon, used the expression chromatic aberration. He knew that blue rays, for instance, being more refrangible than red would have their focus closer to the lens.

Studying the behavior of various lenses as to the phenomenon of refraction Dolland discovered that by combining different kinds of glass, the color aberration could be reduced considerably.

He glued a double-convex lens of crown glass to a planoconcave lens of flint glass. In this unit the dispersion created by one lens was partly neutralized by that due to the other. Dolland had thus constructed the first color-corrected lens, a lens which was still a far cry from our modern achromatic lenses, but the problem was licked in principle. However, even in our best color-corrected lenses there is a certain amount of aberration, negligible for all

practical ends, but nevertheless existent.

It was in this problem of color refraction that Birch-Field became particularly interested. Since various colors focus at different depths he concluded that they must affect the sensitive film emulsion at different levels. There was even a chance, he figured, that molecular shifts, as created by the chemical change in the exposed silver, varied with the focal depths.

If this was the case colors would actually register on black-and-white film. But that was where Birch-Field got stuck. For years he was to try to find a way of making use of the suspected color record, in the film emulsion, a way of translating it into color by projection. Then one day he had a brainstorm. In order to get colored light or a colored image you need color, he decided. So he introduced a filter in back of his projector lens, a filter made up of concentric rings of blue, green and red gelatin, the three primary components of white light.

And it worked! The picture on the projection screen appeared in natural colors. The result was crude. There was too much red and not enough green in it. The whites had a reddish or bluish edge, and the pictures on the whole were unsharp. But in principle the problem was solved. A black-and-white film was projected in color.





(Above) THE INVENTOR placing his gelatin filter in between the lenses of a projector lens barrel.

(Left) MINICAM'S Patty Jordan examines one of the early models of this revolutionary new step to color photography.



AFTER READING this article, you'll recall one friend whose first reaction will be a defiant, dogmatic: "Nuts." The following experiment will be more fun if the friend is also an engineer, one of those level headed gentlemen who, with a slide rule, discover that two and two make 3.99.

Cut out this diagram and paste it on a sheet of card-board. Stick a pin through the center and spin it around. Spun one way, the center turns red, the middle green, the outside blue. Spun the other way, the center is blue.

Birch-Field started improving the color composition. In order to cut down on the red he reduced the amount of red gelatin. That made again some other color dominate which made it necessary to reduce or enlarge the third color. Birch-Field constructed hundreds of filters in a great variety of designs, only to return to the original concentric pattern. Patiently cutting rings out of gelatin which he tinted himself in the three basic colors he finally succeeded in finding what was more or less the right balance.

But still the colors of the projected image were only approximately true. He was perfectly aware of the reason for this. In order to cover the whole spectrum scale his "Iriscope" as he named his filter would have to contain all the colors of the spectrum from blue to red, blending gradually from one to another, just like the rainbow.

But Birch-Field didn't give a hang about color trueness. To produce a rainbow-colored filter was a job for optical specialists, physicists or technicians. All he had to work with were a pair of scissors and gelatin in three different colors. He was satisfied that in principle his theory had proved to be sound.

But what was his theory exactly? Before the invention of the Iriscope he had assumed that light of different colors affects the emulsion in different depths and in different ways. He had nothing on which to base this hypothesis. Now that it worked he had to find a theory to explain what was happening.

"I accepted the explanation which seemed simplest to me," Birch-Field says. "When the light rays strike the film they drill microscopic channels into the sensitive emulsion at an angle varying with the color of the light. We can picture these channels as minute crystal formations in which the axis of each crystal is being turned by the light bombardment until it is parallel to the light rays."

In a wall perforated by a number of bullets fired at various angles, additional bullets fired straight at the holes would still be deflected by the angle made in the wall by the previous bullets. Theoretically, barring circumstances of stress and strain, they will emerge at the same angle as that

(Continued on page 80)

man Ray

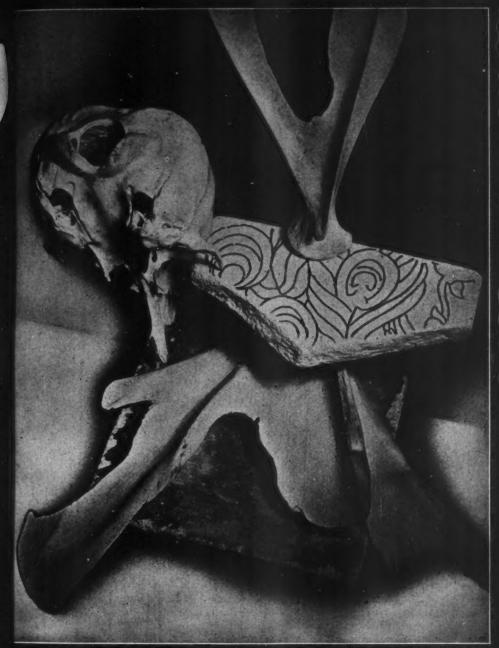
Open confidences are being made every day, and it remains for the eye to train itself to see them without prejudice or restraint.

Photography and Text by Man Ray

HAT can be more binding amongst beings than the discovery of a common desire? And what can be more inspiring to action than the confidence aroused by a lyric expression of this desire? From the first gesture of a child pointing to an object and simply naming it, but with a world of intended meaning, to the developed mind that creates an image whose strangeness and reality stirs our subconscious to its inmost depths, the awakening of desire is the first step to participation and experience.

Each one of us, in his timidity, has a limit beyond which he is outraged. It is inevitable that he, who by concentrated application has extended this limit for himself, should arouse the resentment of those who have accepted conventions which, since accepted by all, require no initiative of application. And this resentment generally takes the form of meaningless laughter or of criticism, if not of persecution. But this apparent violation is preferable to the monstrous habits condoned by efiguette and estheticism.

once a p vent unde or its own ubject rec



DIVERS OBJECTS

Ince a phenomenon has been observed to repeat itself under similar circumstances, it remains to bring that vent under control, and to use it only on occasions that are adapted to the subject. The indiscriminate use, or its own sake, quickly exhausts the interest in a mannerism, for it becomes nothing but a mannerism. If the object requires linear emphasis, emphasize it even with a black line by hand if you are so minded.



THE DYING LEAF

WHY SHOULD I, amidst all the luxuriance of the plants around me, pick out this dying leaf as the preferred subject for my lens? Perhaps, at first, for no other reason than that it was different, being the only one of its kind on the hardy plant. But, thinking back, it seems that I was motivated more by its poignant quality, its greater fragility; that I could get the others any time, but that the dying leaf would be completely gone tomorrow, and now its expressiveness mattered more than the monotonous health of the other leaves.



BOY WITH KACHINA DOLL

If you are using your camera purely as a recording instrument, set it up first at the proper distance which, for portraits should not be nearer than eight feet to avoid any distortion. Make all the adjustments necessary in advance, and then forget your instrument. Now give all your attention to your subject, fussing with it, moving the lights of possible, or the subject, as the case may be. Do not hurry the subject nor yourself, and push the release leisurely. The desire to get a large head on a small surface often leads to disaster; better a bad enlargement of good "drawing" than a beautiful contact print of a monster!



SNAPSHOT

HERE AND THERE, hidden away amongst hundreds of casual snap-shots, lies an image that has possibilities for exploration. Employing the same process used in selecting directly from nature its more significant aspects, I retire to my darkroom with the gleanings more or less intentional of an excursion, and begin a further selection and elimination. Imagination does the rest; not only are new beauties discovered, but in the enlarged image a mode of more dramatic presentation is suggested by appropriate cutting and turning. Swung around on its side, the subject seems to be illuminated by a light other than the late afternoon sun that happened to be shining at the time.



HOLLYWOOD

I CANNOT REMEMBER ever having employed a so-called trick or an "artificial" subterfuge for its own sake—rather because the desire of a non-existent qual-

ity impelled me to find a way of realizing that desire. Two-time printing enabled this brunette to become a blonde, without

(Continued on page 56)

(55]

having to make the doubtful experiment upon herself.

The first time a photographer made the mistake of taking two pictures successively on one plate, he was probably very much annoyed. The second time it happened, he made a print and presented it as a curiosity. The interest and comment it aroused soon led him deliberately to take two successive pictures without changing the plate or film, taking a certain amount of care so that both subjects did not nullify one another. By reducing slightly the exposure for each individual picture, he could maintain a total exposure that would not fog or deaden the final result. However open to discussion from aesthetic consideration, a great liberty had been taken, and a variation in the employ of the time element indulged in, which gave the photographer a sense of being a pioneer.

"Dodging" to correct certain unsatisfactory relations of value is one of the more subtle methods of time variation employed, but always with the object that the process must not be evident.

The implication here is that not only should the process be invisible, but it must not even be suspected. You are free to call this a trick—even a legitimate trick. But the double exposure is not a trick because it is too obvious, and can be judged only on the strength of its effectiveness.

In the same way, I like to employ the time element in a more obvious manner—I like to show my hand, and rely on the interest of the subject's effectiveness

for the real value of the work.

In "Hollywood," the desire to transform the dark hair into blonde was easily realized. I consent to unveil the process, still preserving my dignity, and denying any trickery!

A normal enlargement was made of this negative, that is, normally exposed and developed, but of only about half the size of the print finally contemplated. The hair came out rather dark, and the face quite white. Cutting away the face from the print, the remainder is used as a mask, being placed on a glass that is attached to the vertical support of the enlarger, somewhere between the lens and the enlarging easel. It can be seen now that the reason for making a print smaller than the one for final printing, is that the image of light projected through this mask will enlarge to the size of the final print on the easel, its distance from that final print ensuring a slightly diffused edge necessary to the blending of hair and face.

It now remains simply to expose for the final print size, with the mask in place carefully registered, and allowing full exposure for the face, while the mask holds back the light for as much of the exposure as is necessary to insure the lightening of the hair. The light may be switched off after a determined exposure, the mask removed without disturbing the rest of the set-up, and the exposure completed. Two or three trials may be necessary to obtain a satisfactory result, but no more trial is involved than in the making of a satisfactory normal print.

MAN RAY was born in Philadelphia, 1890, and studied architecture and painting in New York City. He exhibited his paintings in 1912 and took up photography in 1916. In Paris, in 1921, he developed the rayograph technique of lensless photography, making compositions of object directly on photo sensitive paper and film. Contributed to Vogue, Vanity Fair, and Harper's Bazaar. In In New York, in 1927, he presented a film of abstract character at the Guild Theater. He pub-

lished an album of 100 photos, 1920-34, and the copy on page 50 is from that album.

In New York, in 1936, he participated in the Modern Museum of Art exhibition of Fantastic Art Dada Surrealism, and thence back to Harper's Bazaar. In France, in 1937-39, he perfected the "solarization" technique in photography which he first used in 1929. In 1940 he witnessed the invasion of France and came to Hollywood via Lisbon, where he now resides. He will have an exhibit soon at the Los Angeles County Museum.

HOW TO MAKE

BLACK AND WHITE PRINTS FROM KODACHROMES . . .

By A. G. Galloway



(ABOVE) Kodak Transparency Enlarger with Kodachrome in place for making a black and white negative. The ground glass is raised to permit insertion of the transparency. Filters on the left are red, green and blue.

(RIGHT) Enlarger with filter, in operation. Light is five inches above Kodachrome.



A FTER being a mediocre photographer for over thirty years I discovered color photography, and a new interest. Kodachrome was a thrill, but I experienced considerable disappointment and wasted much film until I obtained a good exposure meter, in my case a Weston Master. By applying instructions with the meter, I improved my work. Oddly enough, there is an open field for Kodachrome work. I sold over 4000 slides last year and about 2000 so far this year. This, of course, in my spare time, as my

vocation has been life insurance for the past 23 years. I am an assistant superintendent with one of the major insurance companies.

Becoming so partial to Kodachrome, I began to look around to see if there were other things I could do with it, in addition to taking and selling color transparencies. I began to make black and white 8x10 prints from my 35mm transparencies. Commercial finishers, you know, rarely blow these up beyond 4x5.

Dig out those prize Kodachrome slides



DOUBLE CHERRY Blossoms was made from a 2½x3½ Kodachrome. The negative was made in my Solar enlarger and it was easy to make an 8x10 print with plenty of detail in both the blossoms and the dark leaves.

and open a new field of pleasure by converting them to black and white enlargements. Inasmuch as Kodachrome has no grain, the resulting negatives are astonishing in detail and stand plenty of enlargement. I find 8x10 enlargements easy to make.

There are many ways of making negatives from Kodachrome for those who have the time and the inclination to rig up gadgets. For myself, I use a Kodak Miniature enlarger. This operates like a camera and is simple. The Kodachrome is placed between pegs, which automatically centers it. The emulsion side of the film must be towards light and away from lens. I expose to a No. 1 photoflood in reflector in the same manner as a hand contact printer, using 616 roll film, and get eight negatives to a roll, and this I fine grain develop in a daylight tank. In the Kodak Transparency Enlarger I expose 5 sec. for Super XX and 20 sec. for Panatomic X. This enlarger is fixed focus and fixed lens opening.

By using filters supplied with the enlarger it is possible to bring out clouds and desired detail in the negative. Use the same filters in the enlarger when making the black and white blow-up as you would use when shooting the same scene with your camera loaded with black and white film. I use a pola screen over the lens to bring out cloud detail in Kodachrome and also darken the sky.

I use Eastman Super XX, as it works faster. Panchromatic film should be used for pictures containing red. My enlarger uses 616 roll film. Recently I could not buy any 616 film, but did find one store with two rolls of 116 Superpan Press. When this is rewound on 616 spools it works satisfactorily. I recently tried (Ortho) Superchrome cut film with considerable success. This can be used in a red safety light. Of course, not being sensitive to red, this color becomes black in print, so I was careful to pick slides with no red color.

For the cut film I used my Solar Enlarger, placing Kodachrome in a 35mm holder so that emulsion side of film was toward light and away from lens. I then placed a piece of white paper in a cut film sheath on my enlarger easel and focused the enlarger so that the Kodachrome was projected on the paper, and then set the diaphragm of enlarger lens at f8. I then turned off projector light and removed paper from sheath and replaced with a sheet of cut film, exposed for 5 sec. and developed in D-72 under a red light.

I also tried Panatomic-X film in film pack, placing same on enlarger easel of Solar, focused on cover shield of film pack holder, turned off light, removed cover shield and exposed. Developed in dark. This was not so good, as enough light escaped from enlarger to affect film in spots.

I studied my work and it dawned on me that probably good pictures in themselves are not enough; perhaps it is the idea which sells. I rated a business convention at Atlantic City and took along my camera and tripod (I always use a tripod—it makes a difference). The first night there I took a number of colored shots of the Board Walk. The first one was under exposed 1/25 sec. (I forgot to use the light meter). The rest were full 1 sec. exposures and came out fine. Then I had an "idea" and sent the poor one and a good one (same scene) to Weston Electric Co., explaining that one was taken without a meter and the other with the use of their meter. They bought the idea—\$5.00 for the two slides.

When the Mellon Art Gallery opened and became the "National Gallery of Art," I viewed this building from the inside and looked over the contents and brought home a free catalogue of the list of paintings and sculpture. In this I read that cameras could be used in the Gallery under certain conditions. The big idea struck me. I now wrote to the Society for Visual Education, Inc., at Chicago, and advised them that I was in a position to make Kodachromes of paintings in the National Gallery of Art. They readily accepted my offer and stated they wanted a slide of every painting and sculpture in the Gallery and asked me to start at once. My work proved not only satisfactory to the Society, but also the Gallery. The public may see certain of these slides projected in free lectures at the National Gallery each Sunday. This work has taken me over two years and I have now completed a large percentage of the Mellon Collection, also the Dale Collection, and now the Widener Collection. This experience has been a wonderful teacher. I now know the result of my picture when I release the shutter. I have also learned much from the Old Masters.

I get paid from 50c to \$1.00 for each transparency, but of course this is only a profit if you "figure your time free."

THIS year I noticed how the camera stores were being affected by war conditions and suggested to three stores that



they might add to their business by handling my slides of views of Washington, D. C., on a percentage basis, retailing slides at 50c each. They each took me up on my proposition and have been producing sales. Especially successful is the Capitol Camera Exchange, who have a large sign displayed in their store calling attention to these slides.

Remuneration from my Kodachrome work has enabled me to own a Kodak Ektra with 50mm f1.9 lens and also 90mm f3.5 Telephoto lens, together with all attachments, my Solar enlarger and darkroom equipment. It is a great deal of satisfaction to me to have made this hobby self-supporting and to realize my increasing desires, as I have added a 16mm Eastman Magazine movie and projector and a Miniature Speed Graphic with attachments to my equipment, all from sales of Kodachrome slides.

Wash-off Relief from Kodachrome

We got this wash-off relief tip from a color chemist friend, and it's good. Instead of using the usual kodaloid between the mat and the first transfers, when registering, substitute a sheet of clear pliofilm. Your disposition will improve because the mat won't jump a quarter inch when you only want to move it a hairline. Has to do with like and unlike static charges, and stuff. Good stuff.

MORPHEUS, JR.

[60]

By GLEN FISHBACK

The state of the s

A SEVERY photo finisher knows, children aren't given half a chance. They are backed up against a wall, told to look at the camera, smile, and . . . "click." As we avoid this natural error in child photography we pass up 90% of the competition. But it is hard to see this error in pictures of our own child.

Here are some pictures that represent 90% of the competition in any contest for baby photographs. There is a striking universality in kid snapshots. What is it we want to see in children's pictures? Well, certainly we don't want to see the same old thing over and over, whether it's in children's snapshots or evening dinners. When you tell Johnny to "look at the birdie," he will,—and this is what you get. It's not Johnny's fault.



By C. A. Hummel



By Irving Kravitz



BARBARA JEAN

By H. Vincent Stibler

PAPA COULDN'T WAIT ...

RATHER has a good idea, but he hasn't any time. Children are such perfect models, so unaffected and natural in their movements, that it takes quite a bit of brow-beating to get a "posed" picture. When a child is not being himself—when he isn't interpreting his own ideas by doing what he wants to —his expression becomes strained. That's a "posed" picture.

Here are six shots in which father lost his patience. All eyes ask "Is this what you wanted me to do?—Thus, these pictures fall short of the real thing.

We want a record of Robert, aged three, as he looked, felt, smelled, listened and learned. He did each of these things in his own original way and no one ever did them quite the same. That's why he's Robert and that's why we love him. Instead of giving him a paint brush and asking him to hold it, let's give him the



IN A SPECIAL interview with one of our reporters, Miss Beverly Ann Hinkel said: "Pop told me to look up, so I did. Those things behind me have nothing to do with this picture, have they?"



DR. NADELBACH, of Forest Hills, had the idea all right, but wasn't willing to let this handsome youngster carry it out.



THIS BUDDING artist from Utah, by L. V. Mc-Neely, told us confidentially that when paint's on that brush, "I'm a real worker."



paint brush and set him to work. Sometime within the next two hours (and during the next roll of film) there will be a record of Robert as he began to realize the relation between paint and brush and

paper. He catches on. First there's a line, then there's a cross, then there's a square, and now, by golly, it's a house. Robert is amused and delighted. IT IS A HOUSE. That's the picture you want of Robert.





THESE HONEYS, at the piano, if let alone, might by accident have struck a middle C. Every once in a while they will, and maybe luckily hit the E, too, a third above. How nice it sounds to her ears! Do you have to take the ashes out, fix the screens? Let them wait. What a triumph if you snap her with the somewhat startled, openmouth expression as she tries again for that simple lovely sound C, E.

[63]

KIDS ARE CUTE ENOUGH, THEMSELVES

NCONGRUITY is a lovely thing to behold, but when it is thrust upon a child, he becomes the plaything of unconscious humor. HE no longer makes the picture. Your ideas, not his, are the center of interest. His personality is dissipated. Let's reserve such effects for table tops. Each one of these objects—the pipe, the hat, and the boxing gloves would have attracted a child, but the way he would have played with it would have made the effect less deliberate. What if you were in Giant Land and someone told you to climb inside a baker's oven and peer out? Is that the picture you would want to send home?



ATOM WEIGHT

By C. J. Klingele



By O. P. Eages

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THIS YOURS?

By Ray Romero

SATIRE IS RARE . . .

CHILDREN are natural mimics—that's how they learn. They ape what they see, people, animals—often they imitate trains, clocks, guns. The natural wit of a child provides keen satire. His father takes long strides, with his chin, consciously, thrown a little forward. The child tries to do the same thing, long steps and the chin jutting way out.

Satire is the forgotten bonanza of photographers. The shot (right) which won the Graflex prize some time ago, was also submitted to this contest, and is the only example of satire in the contest submissions. How can we capitalize on satire in a photograph? By recognizing our own weakness for affectation and then sensing when the child imitates it. When satire is mixed with cuteness, its edge is blunted. Here's a little girl who has seen her father fuss with a tripod. One leg is too long. The tripod head tilts to the left. No, now it tilts too far to the right. It doesn't stand solid. It's too high. Now it's a little bit too low. The little girl has observed. Let her play with the tripod and unconsciously she will satirize the father

with some of her own movements. But





JEAN

By Allen C. Martin

when we tell her to peep underneath the tripod and smile, we destroy the child's own mimicry by substituting our own. By shortening the tripod legs and retiring behind some sort of a screen and letting events take their course, it is possible that this bright youngster might have offered some sly comments on her father's actions.

It is hard to remember the last picture you saw in print in which the easy satire of a child was captured by an alert and sensitive camera man. Life had one, showing the young daughter of the English motion picture director, Alfred Hitchcock, gaily trotting along behind her father, slyly poking out her own stomach and taking extra long strides. When our kids mimic us successfully they are at their best. Let's try such shots once in a while.

WHAT'S THE POINT?

I THEN we show a picture to a friend, or when we hang a picture on a wall that we want to live with, it will continue to retain interest if it has a point, either in the mood or in the idea. You will want the next picture you take of a child to have a point. The little girl standing by the vase of flowers, the boy against the side of the house, or the two children holding a stick, are not doing the particular thing that expresses them. Children do a lot of things with sticks. It looks like just a long, spindly piece of wood to us, but to them it takes on many meanings. Every action of a child doesn't have a point, and every moment that a camera is pointed at him isn't going to mean a good picture. 'A stick in the hand of a child who is just standing there results in the picture of a stick in the hand of the child who is just standing there.

Remember the scene by Mark Twain in





By B. C. Molter

which Tom Sawyer was white washing a fence. Along came one of his friends, quietly pretending he was a train, and having a high old time, doing it. Suggest to the child what the stick might be, or give him time to dream it up himself. That general direction in our thought lets a child portrait become more genuine.

As you look at these pictures, they begin to make a pattern to you, probably, just as they did to us. We all are making the same mistakes, in almost the same way, when photographing a child. But, even a bad snap shot is so very much better than nothing at all, and the latitude of film and lenses is so very great that by observing the familiar faults in these photographs we have a good chance of making our own as good as the best of these. Maybe, if we are lucky, too, we can beat them all.

When we start off, with a camera and a child, for a picture, let's wait for the third party—an idea, a raison d'etre for the whole thing.



By Mrs. Benjamin T. Broome



By Ralph Volto

LOOKING AT snap shots of other people's children is a wonderfully objective pastime; and if we look closely it is a profitable one. We see our own errors taking on the form of a pattern. When it isn't "Our Bill," the busy background, the grimace into the sun, the fundamental need of a reason for a picture becomes overwhelmingly clear.

TOO CLOSE . . .

WITH most good Minicams you can come up to three feet: with a

Brownie never less than six. Read the instructions that come with your camera or consult your dealer. If the manufacturer said that you can't come closer than five feet, you can take him at his word.



By Anthony De Pools



By Courtney Brower

[67]

IT'S BETTER WHEN THEY'RE DOING THINGS

I N MR. RECASENS' picture of a child and a hose, with the water pouring down, the child has explored the wetness, and is now making a little circle of her fingers around the water, effect-

ing a complete story. This is a grand snap, but an "all over greyness" diminished its print quality.

The panel of the reluctant host and his friend, the kitten, is by Lou Gardner.



By Aristidas Recasens

By Lou Gardner



[68]

M

of t



MY DAUGHTER JOAN

By Dr. John Benus

AND SO we come to the end of our story of trial and error, of the hasty papa who couldn't wait, of the wayward camera that stayed far away, and of the young gentleman with the pipe in his mouth. The winners: First prize to Dr. J. Benus; second to Glen Fishback; third to Lou Gardner.



I UST as a bigger family is more fun, so it is easier to get more interest in a photograph of two children than of only one, although it is harder to take the picture. Contest entries of two children were, as a class, considerably better than an equal number of entries showing just one. Often the children become interested in each other making it all more natural. Entries of children of the same ages showed an agreeable pattern, due to similar sizes, shapes, and dress.

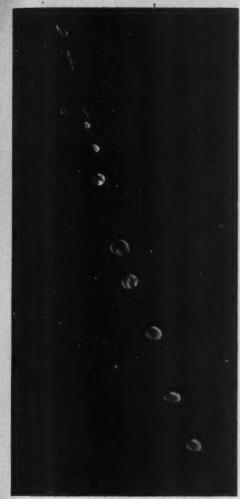
TWO OF A KIND

By Joe L. Parrott



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Nine Paramarines Peel Off in Five Seconds

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PHOTO DATA

CLIP SHEET FOR PERMANENT REFERENCE

Methods for Stain Removal

STAINS ON CLOTH, WOOD, LINOLEUM, ETC.

Color Removers

Stains from photographic chemicals may be removed from white cloth, wood, linoleum, etc., by the use of textile color removers such as White Rit, Tintex Remover and Clorox.

(Caution: Do not use any of these products on colored cloth, as they may remove the color.)

On wool cloth, allow the above remover to soak in for a few minutes, then pour on an acidifier

such as vinegar or 10% acetic acid. Rinse well with water.

White cotton cloth may be boiled in these removers, if it is necessary.

Stained portions of cotton fabrics may be treated in a 5% solution of oxalic or acetic acid for two minutes, wash I or 2 minutes, then apply a saturated solution of calcium hypochlorite. If the stain has not disappeared in ten minutes, wash and re-apply the acid solution and, if necessary, the hypochlorite solution. Be sure to wash all chemicals out thoroughly.

A less severe treatment is bathing in a hydrogen peroxide solution, then washing.

The oxalic acid-calcium hypochlorite and the hydrogen peroxide solutions should not remove color, but it would be wise to first make a test on a small portion of the fabric. With any type of treatment, care must be used to avoid the possibility of breaking down the fabric.

STAINS ON HANDS

Stains on the hands may often be prevented by washing thoroughly with soap and water within a few minutes after first contact with the developer. After stains have formed, they are sometimes difficult to remove and more vigorous methods must be employed.

Edwal Formula

Wet the hands and rub a few crystals of potassium permanganate on the stained area for a few minutes. This produces a dark brown stain, which is removed with a 5% hydrochloric acid solution.* If the stain has set well, three or four repetitions of this treatment may be necessary.

* A 5% solution of hydrochloric acid may be made by adding 1 part concentrated 36% acid to about 6 parts of water. If the permanganate stain cannot be removed, rinse once with sodium hypochlorite solution, which is sold at grocery stores as Clorox, Linco, etc.

To facilitate dissolving the potassium permanganate, dissolve it in a small quantity of hot water (about 180° F.) and then dilute with cold water to make 32 ozs. Add the sulphuric acid slowly, while stirring rapidly.

After bathing hands in the permanganate bath, rinse in water and apply a 5% solution of sodium bisulphite or immerse the hands in a fresh acid fixing bath. If one application is not sufficient, repeat the procedure. Warming the permanganate solution, will assist in removing obstinate stains.

Kodak S-5

	•	Solution	A						
Potassiu	m Perman	Permanganate							
Water	*******		**********	32 ozs.					
		Solution	В						

Rub the hands with a small amount of Solution A, rinse in water; then pour a small quantity of Solution B into the palm of one hand, rub it quickly over the hands, and when free of the stain from Solution A, wash thoroughly with water. If the original stain is not removed, repeat the treatment. If it is desired to immerse the hands in Solution B, dilute one part of the solution, with 4 parts of water.

For Severe Stains Such as Silver Nitrate:

Water											32	OZS.
Potassium	ferricyanic	de									1	OZ.
Potassium	Bromide										- 1	OT.

After applying the above bleach, wash thoroughly, rinse and then immerse the hands in an acid fixing bath.

Some stains on the hands or cloth may be removed with denatured or wood alcohol, or a dilute solution of ammonia (3%).

*1 minim is equivalent to about 1 drop.

(Continued on page 74)

Wollensak means Good Lenses "FAMILY GROUP," by Louis A. Puggard, member of the Photographic Guild of Detroit, and frequent prize-winner for his excellent animal photographs. This appealing picture rook first place in a 1943 national magazine competition. Enlarged with an /4.5 Wollensak lens, its fine detail and clear definition lend technical brilliance to an always fascinating subject. Says Louis Puggard, "Wollensak lenses give the clarity and sharpness I want in my photographs... produce dependable results always." Improve your photography with a Wollensak.

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M I N I C A M PHOTOGRAPHY

PHOTO DATA

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Methods for Stain Removal

(Continued from page 72)

DEVELOPER STAIN ON NEGATIVES

Kodak SH-1

	harden	the	film	in	the	following	solutions
Water							16 ozs.
	Carbon						21/2 drams 73 grains
							32 ozs.

After hardening for three minutes, negatives should be rinsed and immersed for five minutes in a fresh acid fixing bath and then washed for five minutes, before bleaching in:

Stock Solution A

	Permanganate	75 grains
Water to	make	 32 oz.

Stock Solution B

Cold water	 		 						16	OZS.	
Sodium chloride						. ,		.2	21/2	OZS.	
*Sulfuric acid, (OZ.
Water to make								*	32	OZS.	

* Always add the sulfuric acid to the solution slowly with stirring and never the solution to the acid, or the solution may boil with explosive violence and burn the hands and face.

Use equal parts of A and B. The solutions should not be mixed until ready for immediate use since they do not keep long after mixing. All particles of permanganate should be dissolved completely when preparing Solution A, since undissolved particles are likely to produce spots on the negative. Bleaching should be complete in 3 or 4 minutes at 65° F. The brown stain of manganese dioxide formed in the bleach bath is best removed by immersing the negative in 1% sodium bisulfite solution. Then rinse well and develop in strong light, preferably sunlight, with any non-staining developer such as D-72 diluted I part to 2 parts of water. Then wash thoroughly.

Warning: Developers containing a high concentration of suffite, (such as D-76) should not be used for re-development because the sulfite tends to dissolve the bleached image before the developing agent act on it.

Aeroso

Soaking films overnight in a 1% solution of Aerosol to which very little acetic acid has been added will usually remove stains, if not repeat the process, in a fresh solution.

Hiltory

Most yellow stains on prints or negatives may be removed by making a copy film through a yellow filter. As a filter permits light of its own color to

pass, the yellow stains will not be visible on the copy. For light yellow stains, a light yellow filter may be used, but a dark yellow filter, such as the Wratten G, will remove either dark or light yellow stains. It is best to use panchromatic film as it is sensitive to light transmitted by the G filter. When copying films or prints of normal contrast a medium contrast film with fine grain is preferable, such as Commercial Panchromatic, Panatomic-X or Finopan. If the yellow stain contains deposits of any other color, of course the yellow filter will not remove them. Other color filters may be used to remove stains of their own color. A filter may be checked to see if it will remove a specific stain, by viewing the stain through the filter. Filters may be placed either over the film, or over the lens.

TRAY, ETC. CLEANERS

Kodak TC-1 For General Use

Water				32	OZS.
Potassium Bichro					OZS.
Sulfuric Acid C.	P			3	fluid ozs.
Add the sulfuric	acid	slowly	while	stirring	rapidly.

For use, pour a small volume of the tray cleaner solution in the vessel to be cleaned. Rinse around so that the solution has access to all parts of the tray; then pour out and rinse six or eight times with water until all traces of the cleaner disappear.

Kodak TC-2 For Removal of Silver Stains

SOLUTION A

Water	32 ozs.
Potassium Permanganate	73 grains
Sulfuric Acid C. P.	21/2 drams

Add the sulfuric acid slowly while stirring the permanganate solution rapidly. See directions on page 72 to facilitate dissolving the permanganate.

SOLUTION B

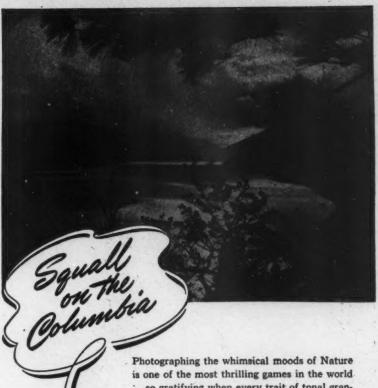
Sodium	Bisulfite .											145	grain
Water												32	OZS.

For use pour Solution A into the tray and allow it to remain for a few minutes, then rinse with water. Apply Solution B, and wash thoroughly.

Percelain and Glass Cleaner

	 	-	-	•	-	_	•							
Water	 									 		40	OZS.	
Potassium												4	OES.	

Add chemicals in the order given, with constant stirring. After use, wash trays and bottles thoroughly.





is one of the most thrilling games in the world ...so gratifying when every trait of tonal grandeur is fully revealed in negative and print. But the subtle play of light and shade in such a view as the one caught here, and in hundreds of similar scenes, presents baffling exposure problems that take a MASTER to master. For the MASTER's unique and exclusive exposure-control dial, its correct and highly selective viewing angle and its extreme WESTON precision, provide its owner perfect mastery over every photographic condition ... assuring a true recording of the scene that inspired the shot. Weston Electrical Instrument Corporation, 674 Frelinghuysen Avenue, Newark, New Jersey.

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New! DUMMY CAMERA -Photographic Optics Made Easy

Now you can make practical experiments in photographic optics to help you understand the simple principles behind scientific optical data. Use our least—make simple dummy camera (with dummy camera booklet to help you)—actually see how leases work . . . when copying, taking ultra-closeup shots using supplementary leases—actually see what happens when you use a camera with double-extension bellows, etc.

A PRACTICAL AID FOR FOCUSING AND COMPOSING WHEN USING SUPPLEMENTARY LENSES . . .

Focus your roll film camera and dummy camera at same distance. Place dummy in front of supplementary lens. Nos you can focus and compose, actually seeing your picture as it will appear on your roll film. Remove dummy and place your camera in position and snap picture. Dummy Camera gives your roll film camera advantages of plate back model.

Directions for making DUMMY CAMERA and use, come with all lens sets. Special Detailed Dummy Camera Booklet—complets with illustrations—40c Postpaid.

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Technique to Work

(Continued from page 45)

Florida.

Do You Like Something? Single it out

and tell us.

Do You HATE SOMETHING? Let's see it.
Do people in certain of their revelations, singly or in crowds, fascinate you?
Why? Isolate that reason. Then illustrate it photographically cropping out all else!
From the emphasis you give this isolated emotion, flows your own viewpoint.

Maybe you do not want to interpret people. All right, go outside and look around you. Do you see houses that laugh at you or houses that make you want to cry? There are landscapes that suggest peace, or home, or "all is right with the world." There are storm scenes that terrify you.

Here you say, is a bit of a cloud, the turn of a road, and a house on a hill. Is that all? Then, perhaps, let it go. But is the house incongruous for some reason; is it personified by a gable and a pair of shutters; does it yawn into the wind, with broken stairs and drunken pillars? Is it droll or so sentimental you want to tweak its hunched chintz curtains?

In your town this month or next month a photographic salon will be held. And what shall it reveal? A man dressed to look like a monk? A serene model dressed to look like a nun? A hand in which you

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can count all the hairs and see every vein; and a nude, as close to a perfect 36 as the photographer could find; her back to the camera, her side to the camera, her head tilted back and on her face a dead pan. If everybody is going to shoot the perfect 36 in one of these three poses, then every nude is going to look alike. And, as you know, they do. In that salon which will be held in your town or in mine, next month or the month after let's see if we can put into it a bit of the community we know best. Making the most out of ordinary situations in life is what interests me in photography.

Let's photograph what we know best and what we like best and do it so others can share our enjoyment of these things we know; rather than, if they are students of photography, just to be intrigued by our mastery of technique. Let's put our

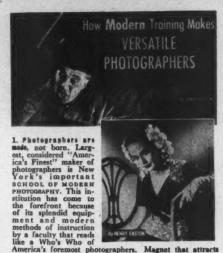
technique to work.

Photography was given to us by men who had two things: Something to say and creative inventive minds that pushed photography ahead technically, etc. This is part of my creed, namely, Why have the pictures in salons slipped back or at least not improved in past twenty years?

The technicians have gone forward. Now let those of us who have something to say, say it in photographs.



"You look mighty fetching, Mr. Sweeney, but as I said when you bought a roll of films this morning only one to a customer!"



America's foremost photographers. Magnet that attracts students from all over the globe is the success of its graduates. Typical case—Henry Easton (see student should who was placed by the School immediately after graduation with Louise Dahl-Wolfe, one of America's foremost fashion photography studies. fashion photography studios.

2. Opportunity for women? Many fair sex grad-uates of THE SCHOOL HODERN PHOTOG-BAPHY have discovered that opportunities in photography are plentiful. Peggy Plummer, recent graduate (see slick BAPHY graduate (see sitch news shot—left) stepped into a grand photography oppor-tunity with the emi-nent James Viles and Pages Plum.

studios, top-notch illustrators. Young, alert Peggy Plummer reports she's thrilled with her job—thinks the School did her a world of good.

did her a world of good.

3. Unels Sam, employer! 9496, of the School's male graduates of the last two years mow in military services are doing their "shooting" with a camera for Uncle Sam...picking up additional experience for post war photography careers while they serve their country. CHESTER FEDOR, a 1943 graduate (see student photo right) is mow attending the Navy's advanced photography cadet school at Pensscola. Pre-induction courses are available for young men. As with all courses at the School, military photograpy may be started any time, day or evening. Tuition fees are moderate.



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NEW YORK 19, N.Y.

Closing Date	Name of Salon	For Entry Blank, Write to	Number and E	of Prints	Sates Open to Public
October 1	*Fourth Annual Interna- tional Vancouver Salon of Pictorial Photography.	J. Crookall, 3746 Etan Street, Vanceuver, B. C., Canada	•	\$1.00	Vancouver Art Gallery, 1145 West Georgia St., Vancouver, B. C., Canada, Oct. 22-Nov. 11
October 1	Exhibition of Photographs of Greece.	Greek War Relief Association, 730 Fifth Ave., New York, N. Y.	Any	None	Metropolitan Museum of Art, 82nd Street at Fifth Avenue, New York, N. Y. Nov. 1-30
October 25	★Columbus 1943 Salan of Photography.	Fred H. Brounlin, Chairman, Salon Committee, 456 Elsmere Street, Columbus 6, Ohio	4	\$1.00	Columbus Gallery of Fine Arts, Columbus, Ohio, Nov. 1-14
November 1	Minneapolis Camera Club's Twelfth Annual Salon of Photography.	R. L. McFerran, Salon Director, 113 S. Sixth Street, Minneapolis, Minn.	4	\$1.00	Minneapolis Institute of Arts, Minneapolis, Minn., Dec. 5-Jan. 2
November 9	11th International Salon, 1943-1944, of the Pic- torial Photographers of America.	John H. Jockwig, Salon Secretary, 715 E. 226th Street, New York, N. Y.	4	\$1.00	American Mu- seum of Natural History, Central Park West and 79th Street, New York, N. Y. Dec. 13-Jan. 2
November 11	1943 New York Salon of Phetography.	Barbara Green, Director, 121 W. 68th Street, New York, N. Y.	4	\$1.00	Galleries of The Camera Club of New York, 121 W. 68th St., New York, N. Y. Nov. 27-Dec. 12
December 7	★Sixth Annual Springfield International Salon of Photography.	Salon Secretary, The George Walter Vincent Smith Art Gal- lery, Springfield, Mass.	4	\$1.00	The George Walter Vincent Smith Art Gallery, Springfield, Mass., Jan. 5-26, 1944
December 10	*Ninth Annual Des Moines International (Salan of Photography.	Walter Vittue, Salon Director, Y. M. C. A., Des Moines, Iewa.	4	\$1.00	Hall of Pho- tography, West Fourth Street at Keosaugua Way, Des Moines, lowa, Jan. 1-22, 1944

	OCTOBER	CONTEST CA	LENDAK	
Open to	Subjects	Prizes	For copy of rules, write to	Closing date
Amateurs	Any.	\$25 in awards, including three \$5 prizes weakly.	Camera Contest Editor, Chicago Herald Amer- ican, 326 W. Madison St., Chicago, III.	Weekly
Anateurs	Any. Award based on sub- ject interest and initial impact.	\$10, \$5, \$4, \$3.	Mechanix Illustrated, 1501 Broadway, N.Y.C.	24fh of each month
Press Photographers	Pictures in which cigars play a news-worthy part and which were taken in course of regular duties and pub- lished.	\$50, \$25, 5 awards of \$20, 5 awards of \$10 and extra awards for special merit.	Photo Judges, Cigar Institute of America, Inc., 630 5th Ave., New York, N. Y.	Sept. 30th and Dec. 31st
Anv	Photographs of heavy, dor- mant industrial scrap col- lections	\$50 War Bond, \$10, \$5 and \$1 in War Stamps.	Business Press Industrial Scrap Committee, 50 Rockefeller Plaza, New York, N. Y.	October 31st





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(Continued from page 49)

of the bullets which made the original holes.

The camera lens can be compared to the wall. Each color hits the film at a different angle and also emerges at a different angle when projected.

"The channels formed in the emulsion by blue light," Birch-Field explains, "show the smallest outward angle, those by red light the greatest, with green holding the center. The Iriscope now puts a red filter in the path of the rays emanating from portions of the film which were exposed to red when the photograph was taken. It places a green filter in the way of green rays and a blue one in the path of the blue ones. As the red leaves the film at the widest outward angle the red gelatin is placed at the outer edge of the filter; the blue forms the center and the green again is in between."

Since red, blue and green are the basic colors out of which any existing color can

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Department 500-A, New York, N. Y. be formed, the Iriscope is capable of just doing that—mixing any color of the spectrum. This at least is true in theory. In practice, because of physical imperfections, a rainbow pattern would produce far more satisfactory results.

It is needless to say that the less color correction a lens has the better it is suited for Birch-Field's purposes. However, even highly color-corrected lenses give results as the correction is never 100 percent.

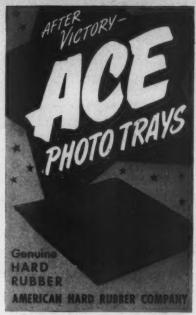
The Iriscope can be used for still as well as motion picture projection. If ever perfected it will revolutionize color movies.

There is an interesting angle to this business of extracting color out of film which never was intended for anything but black-and-white printing or projection. Birch-Field has not tried it yet but he is very eager to get hold of a film of Abraham Lincoln and he promises to give us a full-color projection of it, and one which he will print on paper by the wash-off relief process. Likewise, it is possible to give color to movies which were taken ten, twenty and thirty years ago. What a fascinating field the Iriscope will open one day!

But most important of all—the Iriscope is helping win the war. Camouflage can be detected by color photography as artificial colors register differently from natural ones. The trouble is that the developing of color film is a matter of many hours. Before the slide is ready enemy camouflage experts may have had a whole town repainted. Black-and-white film can be developed and dried in the reconnaissance planes, dropped by parachute and be ready for inspection fifteen, twenty minutes after the pictures were taken.

No wonder that Uncle Sam became interested in Birch-Field's little filters. Today government experts are busy giving the Iriscope the professional refinements it lacked so far, and till victory is achieved the army has a priority on the invention.

But nothing stops you from getting some gelatin and making an Iriscope yourself!







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CAMERA CLUB

NEWS AND IDEAS

By GASTON VAN

EVERYWHERE we hear the same old excuse from officers, program chairmen, etc., that they can't plan programs, get members out to their meetings and otherwise continue their club activities. To which we say BOSH. Most of these same clubs (before Pearl Harbor) had difficulties, but then they blamed one or more officers or committeemen. It takes just as much effort to direct or operate a good camera club, as it does to conduct any successful business. Both require dilligence. The next time something goes wrong at your club ask yourself first: did I do everything possible to avert or correct the difficulty, or did I assume the attitude, So and So will take care or assume the responsibility. Sure, there are other officers, committee chairmen, members, etc., who are supposed to do their own share, but a good president of a club sees to it that each does his part, or replaces the laggard with someone who will respond satisfactory.

THE MONTREAL Amateur Photographers Club, like most other C. C.'s, conducts photographic courses, however they limit theirs to members only. We quote from their "The Monthly Review," August 28 issue, "the courses which have been arranged for the coming season are very complete, and are limited to members. The reason for this is that it is hardly fair to those who pay their dues to help to sustain the club, to allow visitors to these courses. If the attendance is unlimited then the members have nothing to gain by taking out membership in the club. All they have to do is to come in to the meetings as guests." (We know most clubs conduct courses to promote memberships, but the above sounds like a new angle. If this procedure is used by other clubs, we would like to hear from them as to its success.)

SALON exhibitors study the listings of judges in the salon entry forms, very much like a horse race betting fan studies the daily racing forms. They have learned by experience what type of print (subject matter, etc.) will get by Judge So and So. Certainly this state of affairs will never put pictorial photography in that prized niche in the art galleries.

FROM PERCIVAL WILDE comes this:

The Camera Club of N. Y. includes in its membership a gentleman (name suppressed) who perpetrated one of the most amusing and diabolical practical jokes on record. Entering the club one evening, he found that another member had taken a complicated shutter completely to pieces, and that a tray was filled with tiny screws, springs, levers, and gadgets. The joker hastened to his own locker, found in it three or four tiny screws and parts, and added them unobserved to the collection in the tray. The member who was working on the shutter

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succeeded in putting it together again, and was then dismayed to discover that parts were left over. He took the shutter apart, and tried to find places for them—and put it together again—and took it apart again—and worked on it for a week before suspecting the nature of the joke of which he had been the victim.

AKRON C. C. of Ohio will sponsor a School of Photography. The course will be divided into two semesters, the first starts October 6, 1943, with the last semester being completed sometime in May. Their foto females, besides being expert photographers (they beat the men in print competition), are also Sales Tax Stamp collectors. (Seems like in Ohio these things are valuable) they are redeemable by charities for cash. Here in Illinois we just pay. No refunds.

THE TOLEDO C. C., Ohio, had a return visit September 7th of Roy Hirshburg, of the original firm of the three Hirshburgs, who have an unbroken line of photographers from 1853-1943. He appeared by popular request.

THE PICTORIAL Photographers of America, oldest national organization of its kind in this country, will hold their 11th Inter-National Salon in December this year. The attendance at the American Museum of Natural History, where the exhibit will be held, is always the highest in that month. Their meeting nights have been changed back to TUESDAY (as it was some three years ago), instead of Wednesday. First and third Tuesday. This year the executive committee members (of which there are nine) will each be responsible for one program monthly. This replaces the former program committee. Mr. John W. Doscher, president of the Camera Club, will speak at their November meeting.

FROM THE SYDNEY Photo Forum, "Down Where the East Begins" Sydney, Nova Scotia, Canada, comes this method of judging prints. Each members' prints are placed in plain SLIP-IN mounts with only a number to identify them. The members voting by secret ballot, take into consideration whether the picture suits the assignment, darkroom technique, print quality, composition, etc. The prints receiving no votes are rejected, then 1st, 2nd, 3rd are decided. Members analyze the prints, pointing out what in their opinion are the merits or faults. A program found to be very interesting is to have four members bring their cameras to the meeting. They are each given fifteen minutes to describe and point out what in their opinion are the advantages or disadvantages of their cameras. This talk familiarizes other members with the different types of cameras and gives to would-be purchasers first-hand information.

W. E. (GENE) CHASE is again president of the St. Louis Camera Club Council. He has been active in Council affairs since its beginning. Served on the first nominating committee, was corresponding secretary, vice-president 1940, president 1941. He promoted the Nicolas Haz and Axel Bahnsen courses in photography for the Council, and is largely responsible for the existence of the "Council Chatter".



Before the invasion of Sicily, American military strategists studied enlarged photographs of the inland . . . as also did paratroopers and bombardiers.

Perhaps some of these enlargements were made with Omegas because Simmon Brothers for years has been supplying special photographic equipment to both Army and Navy.

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(In other words "a good man to have around the organization".)

"DO YOU KNOW," Viva McDonald, you forgot to mention "Stan" Katcher, ARPS, APSA, is third vice-president of the Metropolitan C. C. Council. You oughtn't slight Stanley that way.

FROM "The Bulletin" of the Seattle Photographic Society, comes this one: "In years to come, we will hear in far off Tibet or Khvalynsk, the gentle sigh of a focal plane shutter, followed by the fervent prayer: 'Allah being merciful, the masterpiece created but now will hang in the Seattle Salon." (Boy! we call that OPTIMISM Plus.)

THE ALASKA C. C. of Anchorage, jointly with their local U. S. O., held a salon exhibit last June 26-27-28 known as the "Alaskana" show. Prints were restricted to Alaskan photographers and native subjects. A traveling show was selected to be shown at other U. S. O. centers in Alaska.

SOMETHING NEW in Salons: It is the First Annual American Color Slide Salon, sponsored by the Color Division of the P. S. A., with the co-operation of the Chicago Color C. C. and the Chicago Area C. C. Association. Slides will be exhibited, by panel and by projection, at the Art Center, Chicago, from December 6 thru December 18. Deadline for entries is November 29, 1943. Entry forms may be obtained from G. W. Vanden, 620 N. Michigan Ave., Chicago, Ill.

UNIQUE among camera fan activities is the Associate Membership of the Metropolitan Camera Club Council. This group is designed especially to cater to the camera bug who thinks he (or she) is allergic to Cee Cees because he is not good enough, doesn't like clubs, or what have you. For the nominal dues of \$2.00, anyone interested in photography may join this group and attend its informative meetings, where he will not be called upon to help turn the wheels. Those interested are requested to get in touch with the Council's secretary at 106 West 13th Street, New York 11, N. Y., or come to the first meeting on October 21, at 8 P. M., Hotel Woodstock, 127 West 43rd, N. Y. C.

A MODEL Chapter: We cite this from their "Aims and Purposes" (Seattle P. S. A. Chapter). The meetings will be as informal as possible to promote "good fellowship" and free and open discussion. In the words of their secretary-treasurer, Ray B. Pollard, "legalized bull-fests". It is not the purpose of this Chapter to form an ISOLATED GROUP with interests ONLY within ITSELF but rather to help others, the individuals who are interested in photography and PHOTOGRAPHIC CLUBS.

FORT DEARBORN C. C. of Chicago announces the opening on October 12th of its Semi-Annual School of Photography. Ten lessons and demonstrations will be given by members of the club. Among the prominent pictorialists on the faculty are: Dr. Max Thorek, Morris Gurrie, H. K. Shigeta, J. P. Wahlman and Rolland A. Rahe.

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(Continued from page 29)

This German pilot had his legs amputated, and was recovering at the hospital. One day when he was told, he was to be sent home by plane, he began to cry and carry on. But, explained the Norwegians, the war is over now for you and you are going back to your family in Germany. "Oh, no," said the pilot. "I have carried cripples and unloaded them. Hitler has said there are not going to be any cripples in Germany after this war!"

AS you will remember, the situation in France forced our Allies to give up Norway. We wanted to carry on, but when we discovered that we could get no supplies or ammunition, we were forced to give up the organized fight in the country itself. We had ammunition left for one day. I stayed to take care of the daily newspaper as long as possible, but fled to the country on the orders of the High Command before the Germans caught up with me. I walked for five wonderful, bright days across the mountains to Finland, carrying my food and my photographic equipment on my back, and for eight months in Helsinki, arranged for visas and money to go to America and continue the struggle.

On March 1st, 1941, I crossed the border into Russia, travelled through beautiful Leningrad and Moscow, went through Stalingrad, a busy, large factory city, and through the Caucasian oil fields to the Caspian Sea, to Iran, and down to the Persian Gulf. I knew that I was bound to find a Norwegian ship in any Allied or neutral port. I found a tanker, went on it to Bombay, on another freighter to Ceylon, Cape Town and Montreal. After spending six weeks in Camp Little Norway, the Norwegian pilot's training center in Toronto, I went to the United States. And now I am in charge of the Photographic Department at the Norwegian Embassy in Washington. I have only one desire: To go with the invasion troops into Norway and work as a war photographer again.

A REAL LITTLE CHARMER



A real little charmer is Sue— With red hair and eyes of deep blue; But whe'd ever know it? This snap decan't show it! Oh what can her Daddy do?

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This Twin, white reflector unit uses No. 2 Photoflood or similar size household lamps most effectively. It has 11-in. diameter, 9-in. deep reflectors; nickeled sockets, swivel-ball mounts and center-mounted swiveling cross arm on 6½-ft. collapsible stand. 13-in. cords from the reflectors plug, into a 3-way receptacle on 10-ft. cord with plug. By overlapping the effective light from both reflectors, short exposures are possible even with household lamps!

VICTOR No. 6205 . \$10.10
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VICTOR

FREE exposure guide for using houshold lamps It's complete. Send for it at once.

James H. Smith & Sons Corp.

OUT DE THE LAB Tips Trom a icians: Technicians Motebook Proposition By RALPH HABURTON

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way definitely committed

Are you definitely committed to the "good-enough-for-grandpa" school? If you are accustomed to develop for 14 minutes, for instance, why not start off the season with some comparisons? Use 12, 14 and 16 minute developments of the same subject and see which is best, not only with the paper contrast you usually use but with others too. Variations in original exposure are worth trying so that you can assign your own emulsion speed to the film you use, and thereby come closer to getting the kind of negative best adapted to your own style.

Hypo eliminators may seem a lot of bother, but if a print isn't worth saving, it isn't worth making. As an aid to print permanence, I recommend the Kodak HE-I formula. After a half hour washing with the wash water at 65 to 70 degrees, prints should be immersed in the hypo eliminator for six minutes and then washed again for another ten minutes. Longer times are required for double weight prints, or if the wash is under 65 degrees. The formula is:

HYPO ELIMINATOR

Water			ounces
Hydrogen	peroxide, 3% solution 4	fluid	ounces
Ammonia,	3% solution	fluid	OUNCES
Water to	make 32	fluid	ounces

We've seen several new darkrooms equipped with fluorescent lights. Our advice is, don't do it unless you have another source of white light. The wait and ensuing flicker is quite aggravating, particularly if you have occasion to repeatedly examine prints.

A former press photog gave us this as the fundamental precept of photography—"Always Pull the Slide".

35MM POSITIVE TRANSPARENCIES

1 strip 36 exposures 35c 3 rolls \$1.00; 6 rolls \$1.75

We will grist 35MM positives from your 33MM negatives for projection from 2"22" slides or from the full strip, fleturned intact. Fine grain developing of 35MM negatives 25c. Released cartrièges of 35MM fine 40c. Vaporating, 5c roll, negative or positive. Catalogue of 8tock Slides on request. 32MM Cardboard Slide Mounts, 80c. FMEE MAILES. POSITIVE PRINT CO., 117 B. Wess Ave., Lieslee, B. J.

35 M.M. FILM



DEVELOPED, VAPORATED FOR DISCRIMINATING CAMERA FANS

at no extra cost. Your 35MM roll ultra fine grain processed and each exposure enlarged to 31,44% on deckle-edged gloss or matte paper. Only \$1.00.

18-Exposure, 60c.

16-Exposure, 50e

Reloading with Eastman Film: 36 - exp. 50c; 18-exp., 30c.

Quality that Excels Leaders Since 1920

RAY'S PHOTO SERVICE "

[86]

Benzotriazole added to your print developer will aid in obtaining blue-black tones. It can be obtained in a solution which can be added in such small quantities that the final concentration is only 1:10,000.

All photographic equipment should be given periodic checking. You haven't much chance of getting sharp pictures unless your camera is rigid. If yours is a press-type camera, pay particular attention to the fit of the lens and lens board, and to the front standard. The condition of the pressure plate in the back of roll film cameras is also highly important, as this plate must hold the film in its proper position.

16 mm. movie cameras with provisions for single frame exposure give satisfactory and extremely economical results for identification pictures or for photographing coin collections, etc. In photographing objects from collections, assort them according to size if they are to be photographed each as large as possible. This will avoid frequent re-focusing.

A lot has been said about the necessity of keeping all solutions at the same temperature in order to decrease the possibility of reticulation. In a recent test we got reticulation with all solutions at the same When the temperature of temperature. the stop-bath following the developer was lowered to where it was ten degrees colder than the other solutions, there was no reticulation in spite of the abrupt drop in temperature.

For copying line drawings, manuscripts, and similar black and white material, try making your negative directly on contrasty bromide paper, loaded in your holders as you normally load film. The paper negative can be printed in a contact printer, or can be again copied with paper loaded in the holder once more. The latter paper will yield a positive print similar to a Photostat. The advantages are economy of material and ease of retouching and correction. Most photographic papers are color-blind, but special orthochromatic papers are made.

The CRAFTSMEN'S GUILD HOLLYWOOD VIEWER





NO OTHER SLIDE VIEWER has all

These Advantages!

- I. Extraordinary crystal-clear magnification.
- 2. Remarkable third-di-mensional effect.
- 3. High grade lens whose depth of focus makes
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 4. Rounded design allows corners of slide to project for easy handling.
- 5. Can also be used for viewing 35mm. film strips.

 6. Made of gleaming Tenite,
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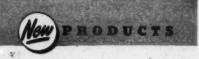
35MM FILM DEVELOPED &

AMERICAN STUDIOS

LA CROSSE, WISC.







Radiant Non-Metal Screens

AN illustrated catalogue of screens has been released by the Radiant Manufacturing Corporation, 1140-46 W. Superior Street, Chicago, Illinois. A new line of non-metal screens is available for immediate delivery without a priority.

A special section of the catalog explains two plans for renovating and repairing old screens for which a new department has been installed.

New Castle Films

"VICTORY IN SICILY" and "Bombs Rock Italy," are covered in the latest Castle Films war release, available now at photographic



The greatest armada that ever sailed is seen as Yanks, British and Canadians storm the beaches of Sicily under cover of a terrific naval and air bombardment. Stuka dive-bombers seeking to stop the landings are shot down. New weapons never before used in warfare get their baptism of fire and come through with spectacular success as the picture shows novel landing craft.

"Bombs Rock Italy" shows the devastating effect of concentrated air attack upon Italian supply and transportation centers, particularly the knockout blow given the railroad concentration yards at Rome. Pictures taken from one of the Flying Fortresses participating in the Rome attack show bombs falling with perfect accuracy upon strictly military objectives. In the aerial views of Genőa, Naples and Rome, it is possible to see the railroad tracks and air fields directly below as hundreds of bombs fall and burst within a carefully selected

BI

"Victory in Sicily" and "Bombs Rock Italy," can be obtained from photographic dealers in five 8mm and 16mm sizes and lengths. Castle Films, Inc., 30 Rockefeller Plaza, New York

CLASSIFIED ADVERTISING

MINICAM PHOTOGRAPHY has 64,242 paid A. B. C. monthly circulation; including all manufacturers, jobbers and dealers in the photographic industry; as well-known photographers, instructors of classes in photography, photo squads of the Armed Services, advanced smateurs, beginners, and the Technical Library of EVERY Army Air Base in America. These 64,242 readers are an influential market. Classified advertising: Ten cents a word. Each word counts. Forms close October 8 for November issue, Cash with order.

WANTED-TO BUY

WANTED—Leitz Summitar lens or a 50MM., F3.5, calibrated in feet. Leica 111B., with accessories. G. Kremer, 33-28 157th St., Flushing, N. Y.

INTERESTING PHOTOGRAPHS of Pigeons and Pigeon Lofts. C. A. Naether, 4442 Woodman, Sherman Oaks, Calif.

Oaks, Calif.

ROLLEIFLEX, Leica, Contax, Retina, Super Ikonta, Graphic, Accessories. Private Only. DiFiglia, 699 Bushwick Ave., Brooklyn (21), New York.

SELL YOUR PRINTS and Negatives of the glamour type. Send for inspection with price. Wincholt, Box 308, Red Lion, Penna.

WE BUY, SELL AND TRADE all types of cameras and equipment. Get our price before you sell. Rosenfeld, 123 South 13th St., Philadelphia.

WANTED—Female Nude Pictures, 8x10 Glossy. Will pay \$5.00 each for all accepted. Mail prints to Garrison Associates, 154 Shepard Ave., East Orange, N. J.

BOM ASSOCIALES, 137 SIREPART Ave., East Crange, N. J.
 IGMM. SOUND PROJECTORS AND FILMS—Multiprises, Box 1125, Waterbury (89), Conn.
 WE PAY YOU HIGHEST PRICES for Eastman Direct Positive Paper. Any aize. Any quantity. State expiration. Cash waiting. Distance no barrier. Peerless Vending Machine Co., 220 West 42nd St., New York City. Wisconsin-7-8610.

FILM—16 MM. Magazine Kodachrome urgently needed. Stewart Stevens, 40 Edgewood Lane, Bronxville, N. Y. WE BUY-EXCHANGE-SELL Sound and Silent Films and Projectors. Multiprises, Box 1125, Waterbury, Connecticut.

SEND US YOUR CAMERA TODAY. WILL SEND CERTIFIED CHECK BY AIRMAIL, IMMEDIATELY. Items held ten days for your approval of our price. Free estimates—Trade-ins. Highest prices in the U. S. for photo equipment. "Cleveland's Camera Super-Market." Rothart and Reitman, 1900 East 9th St., Cleveland, Ohio.

FOR SALE

SENSITOMETER \$2.94 and Opacitometer, or Densitometer \$1.82, establish grade of paper and exposure for the best possible print or enlargement from any negative. Easy to use, for amateur or professional. Friedell Laboratories, 1629 Telegraph, Oakland (12), California.

tive. Easy to use, for amateur or professional. Friedell Laboratories, 1629 Telegraph, Oakland (12), California. BANTAM SPECIAL—F2. Perfect condition. Lots fresh Kodachrome. Brand New Kodasilde Projector Model 2, with Automatic Changer and Case. Sell complete only, \$185.00. J. M. Mansfield, P. O. Box 792, Enid, Okla. FINE 654826 VIEW CAMERA with four Holders Case, fine lens and Shutter. Complete \$50; Plaubel Makina, 174, 3 bensel, extras \$600; Binoculars, 6 to 15 power, best makes; Cooke and Dallineyer Telefoto Lenses 14" to 17"; 5" Telefoto 16MM, Wollenssk F4.5, new, \$75; 1" F2 Schneider XENON 16MM, \$40; 5x7 View Camera with 7" Dagor, \$75; Eastman 16MM, Magazine F1.9, \$125; 4x5 and 3½x4½ Graflex with Cooke Zeiss and other lenses, \$33 up; Speed Grafics, Contax, Contaflex, Exakta, Korelle, Deardorff, Leica, Robot, Nettax, etc. No list. State your needs. Will buy or trade. What have you? Wells-Smith, 75 E. Adams, Chicago (3), Ill.

BIG LENSES CHEAP—12" F4.5 Velostigmat, good condition, \$65; 12" F4.5 Cooke Portrait, fair, \$65; 15%" F5.6 Cooke Portrait, perfect, \$125; with \$" Bausch & Lomb prism, \$200; 15" F9 Kollmorgen Process, fair, \$55; 16" F8 Cooke Process, seriect, \$125; with \$" Bausch & Lomb prism, \$200; 15" F9 Kollmorgen Process, fair, \$55; 16" F8 Spencer Process, perfect, \$100; 21" F7.5 Turner Reich, perfect, \$125; 10CM. Carl Zeiss Tessar, perfect, \$40; "F5.5 Schneider Xenar, Perfect, \$50; above lenses all in iris barrel. 127 MM, perfect, \$50; above lenses all in iris barrel. 127 MM, P4.5 Kodak Anastigmat, Compur Rapid, perfect, \$50. Leonard Westphalen, 506 N. State St., Chicago (10), Ill.

WESTON MASTER sold best offer. Roll Film Graflex, \$25. Levey's, 735 Noble Ave., Bronx, N. Y.
ABBEY—3x Flashgun. Excellent condition, \$20. Cpl.
Andrew J. Mott, c/o Base Camouflage Office, Camp
Pinedale, Fresno, Calf.

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OIL coloring photographs a fascinating hobby or profitable business. Learn at home. Easy, simplified method. Previous experience unnecessary. Send for free information and requirements. National Art School, 1515 Michigan, Dept. 2126, Chicago.

5c BUYS back-dated magazines. Foreign, domestic, arts. Catalogs 10c. Cicerone's Magazines, 363 First Ave., New York (17), N. Y.

MOVIES-SLIDES-PHOTOS

MOVIES FOR MEN — Travel, Comedy, Glamour. 8MM.-16MM. Lists free, with glamour sample, dime. Reeley, 42-M West Market, Corning, N. Y. 8MM. or 16MM. FILMS. Cavalcade of Beauty or Silk Stocking parade, 50 feet only \$1.25. Wineholt, Box P24, Woodbine, Penna.

IMPROVE YOUR PICTURES — Photographic Test
Chart, checks your lens and equipment. Exposure,
developers, filters and films analyzed. Complete with
instructions \$1 postpaid. Money-back guarantee. Spencer
Company, Box 52B, Mount Vernon, New York.

SOUND and SILENT FILMS exchanged, bought, sold— 16MM. Sound Projectors wanted—Bargains always—Free lists.—Multiprises, Box 1125, Waterbury, Conn.

lists.—Multiprises, Box 1125, Waterbury, Conn.

EXCHANGE YOUR FILM 16MM, SUBJECTS, new or used, for brand new 8MM, subjects. No Exchange Fee. Multiprises, 171 Euclid, Bridgeport (4), Conn.

16MM. SOUND FILMS, NEW and USED, SHORTS and FEATURES, RELIGIOUS and action—sold, exchanged, bought—always Lowest prices—Largest lists, Multiprises, Box 1125, Waterbury, Conn.

Multiprises, Box 1129, Waterbury, Conn.
5-16MM. FILM-SUBJECTS—Black and white and color; sound or silent. Largest selection ever compiled; 75c to \$100. Write for new, DeLuxe catalog—profusely illustrated; 25c (coin or stamps) refunded first purchase. Hollywood Movie Supply, Hollywood, Calif.

I BRINGS "Surprise" assortment 8MM. colorful titles! Guaranteed. LeMoine Films, 926 West Austin St., Nevada, Mo.

MOTION PICTURE PROCESSING—100 ft. 16MM., 75c; 50 ft. 16MM., 50c; 25 ft. 8/8MM., 35c; 25 ft. 8MM., 25c. Ritter Film Service, 629 Lyman Avenue, Oak Park, III.

GLAMOUR NEWSREEL No. 4. Majorettes and beauty queens. 50 ft., 8 mm., regularly \$2.00, only \$1.00. 16mm. 100 ft., \$2.50. Lists, sample, dime. Jenkins, 592-D, Elmira, N. Y.

MISCELLANEOUS

REPRODUCE any snapshot on hankies, slips, wood, leather, etc. Outfit \$1.00; no stamps. DISSELL CO., 4667 Rockwood Rd., Cleveland, Ohio.

TRICK CHALK STUNTS—Catalog 10c. Baida Chalk Talks, Oshkosh, Wis.

AT LAST! How and where to sell your pictures. A straightforward monthly full of hot market tips worth hundreds to alert photographers. Send 10c for sample copy. Free-Lance Photography, 219 East 44th Street, New York City.

THRILLING ART PICTURES, povelties, books. Big assortment with list, \$1.00. Edward Gross, Dept. M, Carnegie, Pa.

CAMERAS AND EQUIPMENT WANTED

WANTED: Used Speed-O-Copy for C-3 Argus. Geo. Smith, Escalon, Calif.

DEVELOPING—PRINTING—REPAIRING

GLOSSY CONTACT PRINTS 3c each from any size roll film negative, except 35MM. Capewell, 136 Maple Ave., Haddonfield, N. J.

35MM. FANS—See our display advertisement on page 96.

XUM



TAKE IT IN STEREO!

THAT'S the way the Army and Navy take pictures! No "flat" print can compare with a stereoscopic

transparency made and enjoyed with the Stereo-Tach and Viewer Outfit #101 and your 35mm camera. \$6 Still available at

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KODACHROME SLIDES

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YOU'LL BE DELIGHTED

35mm. FILM DEVELOPED **36 ENLARGEMENTS**

8 EXP. ROLL ENLARGED, 35c 16 EXP. SPLIT ENLARGED, 55c

Prove it to yourself—send your next roll to us. Fine grain developing. "electric-eye" precision. Modern Beauty prints 3/4.44%", deckled, with embossed margin and date. If less than 25 prints FREE print credit. Send money and roll or write for Free Mallers.



Professional contact finishing, 8 Exposure roll developed and complete set of Super Professional prints. Print credit for poor exposures.

U. S. PHOTO SERVICE Bex \$710-A Dept. E Chicago 80

Fotofolios for Enlargements & Snapshots

New Fotofolios to hold 5x7 and 8x10 enlargements, latest additions to the E. E. Miles line, are available for immediate delivery from Arel Photo Supply. These Fotofolios utilize the gummed hinge method of mounting, are attractively bound, and have 8 pages. The 5x7 fotofolio (No. 47) holds 20 enlargements on each page-160 in all; price-\$3.50. The 8x10 fotofolio (No. 410) holds 10 enlargements on each page. Total capacity—80 prints; price \$3.75

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Air Force and Marine folios have been added to the Fotofolio servicemen's group, of Navy and Army albums. Boxed in pairs these fotofolios have a capacity of 112 photos and sell for \$1.00.

The genuine leather pocket size Fotofolio holds 12 snapshots and is bound in red, green, brown or black; price-\$1.00.

All of these items are available for immediate delivery from Arel Photo Supply Co., 918 Delmar, St. Louis, Mo.

Kodak Information Book

Kodak's twenty-four page information book, which sells for 25c, gives data on Kodak films, cameras, filters, lenses and exposures. One section, by the Eastman Kodak free Picture Clinic in Rochester, New York, illustrates common snapshot faults and tells how to correct them. Available from your Kodak dealer.

S. V. E.—Coronet—Education Service

A new service of The Society for Visual Education and Coronet Magazine offers slidefilms for group instruction, and separate bound reprints of the Coronet Picture Story.

These visual aids can be used in social studies and related subjects, and will have a direct relationship to the activities, problems, and personalities of the war. The September release tells the story of submarine warfare and will be followed in October by "China Fights Back," by Madame Chiang Kai-shek. The November release will be a picture story of the United States Navy, in full color, both in the reprints and on the slidefilms.

The slidefilms will be produced and distributed monthly throughout the school year by the Society for Visual Education, Inc. The cost to schools will be \$2 for the entire series of eight slidefilms and booklets, including the



United States Navy. Reprints of the Picture Section will be available at 1c each in lots of 25 or more, and may be ordered from the Society for Visual Education, MJS. Inc., 100 East Ohio Street, Chicago (11), Illinois.

GADGETS, KINKS AND SHORT CUTS

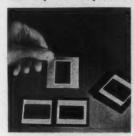
Home-made Camera Dolly

TO MAKE A CAMERA DOLLY the items required are three two-by-fours a little longer than the spread between the legs of your tripod, three large casters or roller skate wheels, and twenty, minutes.



In the illustration, the boards are 40 inches long and the holes are one inch in diameter, by one-half inch deep.—Dimitri O'Rourks.

Masks Improve Composition



COMPOSI-TION may be improved on bantam slides by using 35mm. masks to crop unwanted areas. A bantam frame is one-eighth inch larger than a 35mm, frame. — John K. Karlovie.

Film Sheaths for Easels

CUT-FILM SHEATHS, which are made in sizes from 2½ x 3½ up to 8 x 10 inches, make emergency easels. Cardboard strips at both ends insure white margins, and white paper pasted to the bottom, aids focussing. Enlarging paper is inserted as cut film would be. In using light weight sheaths, it is best to fasten them to a large piece of wood, for stability when inserting the paper after focussing.—

H. Klein.

In the "HEART" of Summer

THESE TWO AIDS WILL GREATLY ENHANCE THE APPEARANCE OF YOUR PRINTS AND NEGATIVES!



RETOUCH-ALL

KIT

The complete dyeretouching kit for prints and negatives . . . general or local bleaching . . . masking for

vignetting or complete or partial background removal. Eliminates the old-fashioned methods of pencil retouching . . . gives you cleaner, smoother, more beautiful and lasting job. No experience necessary to work with RE-TOUCH-ALL . . . just wet your brush and begin!

- I-az. Concentrated Blue-Black Retouching Dye
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- I-az. Concentrated Sopia Retouching Dyo
- I-oz. Wondrop Concentrated Wetting Agent
- I-oz. Correctol I-oz. Masking Fluid.
 12 Lintiese Biotters, Brush, Cotton Sticks, Dropper

Pios-FREE—a copy of the brand new booklet,
"Manual of Dye Refeaching," by A. J. Lockrey.
Contains complete information about the remarkable new method of "retouching with dye" in all its phases. The material contained in this book alone is worth practically the purchase price of the entire RETOUCH-ALL KIT.

WONDROP

. . an aid to summer photography

When summer humidity is high, the film dries more slowly than usual, many times causing stains, water spots, excessive grain. WONDROP cuts drying time by 50%, thus reducing the possibility of grain-y

negatives. WONDROP is the concentrated wetting agent for all photographic solutions and operations dealing with fixing, toning, reducing, intensifying, coloring, opaquing, spotting and retouching. Use just one drop for each 8 ounces of solution. 60¢ for 2 fluid ounces, or 1000 drops. \$1.00 for 4-oz. bottle.

At your dealer's or order direct

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35mm. ONLY
ECHNIFINISH LABORATORY

our duty to carry on the photofinishing part

Meanwhile, what we are doing for the war

effort is keeping our wits sharp, our equipment up-to-date, and, after Victory we'll give

of our business as before.

15% to 20% IMORE...

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The idea that's taken the country by storm. We'll sell your camera for you... and be able to get you 15% to 20% more than if it is sold at straight cash sale. Send us the camera with your selling price. We'll bend it, advertise it, and when we sell it, you'll get your check immediately, less our commission. Save time, trouble, get more money for your camera. Let Herbert sell it. Here are some values we now offer: SUPER IKONTA C (2½x3½) F3.5

Tessar Case \$150.00

SUPER IKONTA B (2½x2½) F2.8
Case (One window) 185.00

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CONTAX II F2 Sonnar Case 275.00

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GRAFLEX SER. B (5x7) F4.5 K. A.
B & J PRESS (4x5) F4.5 Tessar

Comp. Kal. R. F. 150.00

AVUS (9x12) F4.5 Skopar Case, Acc. HENRY HERBERT

485 Fifth Avenue New York 17, N. Y.

60.00

Roll Film Development

A DEVICE, for keeping roll film immersed during the "see-saw" method of tray development, can be made from a piece of an unpainted wire coat hanger (a painted one might chip), a section of smooth rubber hose, and a hollow rod or tube. The length of the rod and hose depends on the width of the largest film you use.

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Slip the rubber hose over the rod and then insert the wire. Using pliers, bend the wire, as shown in the illustration and make loops for holding the rubber suction cups.



For use, moisten suction cups and attach to bottom of tray. Thread the film, with the emulsion side down, through the "hold down device," and use enough developer to cover the unit. Wash thoroughly before and after use to prevent contamination of the solution, or scratching the film.—Andrew M. Lavish.

Conserving Chemicals

LARGE BOT-TLES, filled with water and placed in the tank, reduce amount of chemicals required to cover film.

cover film.

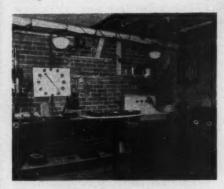
Hot or ice
water in the
bottles tempers



the solution .- Dimitri O'Rourke.

Darkroom Illuminators

SMALL PIECES of cloth covered with a luminous paint, or Conti-Glo, the material that comes in children's toy black-out kits, will help you find your way around the darkroom. After a few moments exposure to light, the material glows for several hours and small pieces will not fog film.



The black and the white circled places on the photograph indicate where tape was placed on the chemical shelf, the safelight cord, the sink, the wire for hanging film holders, the number and pointers of the clock and below the developing tanks.—D. O'Rourke.

Taking Stills at a Movie

Sirs:

My camera is a 35mm. with a 3.5 lens and I would like to take some shots of a movie in a theatre. Is it possible to use an f3.5 diaphragm stop at 1/16 second with Super-XX? I think the frames travel at the rate of 16 per second. Will it be necessary to use a desensitizing capsule to step up the speed of the film?

HOWARD B. LEIGHTON,
137 Eaton Drive,
Middletown, Ohio.

 Standard projection speed is 24 frames per second, not 16. You should be able to get satisfactory results with Super-XX, shooting at f3.5, 1/25 second. Hypersensitization or a desensitizing capsule should not be necessary.—ED.



Photo by Joseph N. Hazell

Graflex Owners!

... now you can enjoy speed flash photography!

Kalart engineers have perfected a method of synchronizing the focal plane shutter of your Graffex camera at speeds above 1/500th second. Installation of this unit is made only at our factory—and will require about fourteen days for fitting, checking and adjusting.

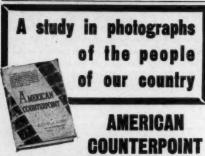
A complete installation including synchronizing

unit, Kalart Master Battery Case, reflector and attachment clip is \$20.00, plus transportation, (Suitable priority necessary.) The Kalart 9 Volt battery case. reflector and attachment clip can be secured at the same price, without priority. Have your photo dealer send us your Graflex, or sand it direct.



THE KALART COMPANY, Inc.
Dept. 510. Stemford, Conn.



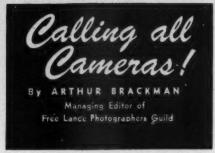


By ALEXANDER ALLAND Introduction by PEARL S. BUCK

Taking portraits of American Indians, Negroes, Chinese and some fifty other nationalities that comprise the American people is Mr. Alland's distinctive specialty. Much can be learned from his approach to portrait photography—his tactful sympathy toward the subject, his handling of angle, lighting and choice of materials. To the amateur as well as to the professional photographer, AMERICAN COUNTERPOINT will be an inspiring and technically desirable reference volume.

Featured in the September MINICAM. \$3.00

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LET'S POISON POLLYANNA

It has long been my contention that Pollyanna, who made her debut in the halcyon years before the First World War, has outlived her active usefulness and should be retired to a good, clean farm for decrepit mares somewhere in Kentucky.

Photographically speaking, Pollyanna was the personification of the sweet, gladhearted optimism of a generation that didn't know what the score was. Translated into photography she became a babe uniformly afflicted with Ipana teeth, with a face that was insipid, falsely optimistic and greedy. The tangible result has been scores of thousands of photographs devoted to the happiness theme.

If you think this is an innoccuous idiosyncracy, you should have been with me one night last week. I was hanging from my customary strap on the Flushing local when I happened to see a Chesterfield ad. It was a big four-color poster posted at one end of the car.

Now, it was a hot, sticky night and I had worked like hell all day and I was dog-tired, and something about the Chesterfield ad offended me.

At first I didn't see why the ad should get me sore: It was a picture of three smiling girls—a WAVE, a WAC, and a welder, and you have probably seen it. And I realized, after a few moments, that the thing that annoyed me was that here was I and sixty other people, jam-packed sweating into a crowded subway train after a gruelling day's work, and the news-

paper headlines were telling of another thousand soldiers killed that day, and our corns were hurting, and the train was slow and here was a picture of three pretty, unbelievably carefree neat and smiling girls looking like they had just stepped out of a Saks-5th Avenue window. And the idea of the ad was supposed to be three typical patriotic girls and they were smoking Chesterfields and just that morning I had seen a Camel ad of similar nature with smiling pictures of other girls saying Camels were first in the Armed Forces by actual count, and one of the ads was lying.

I am not alone in my dislike of photographic advertising Pollyannaism.

YANK, the Army magazine, which is read by men with a firmer grip on realities than most of us soft-bottoms, took a whack at an ad campaign featuring the slogan "Light up and Relax," saying:

"This advertising version of an American dogface sprawls comfortably against a clean green jungle background. Not a whisp of whisker mars his healthy smiling puss. There's a press in his pants. And for gosh sakes, his shoes are shined!

"Since the first Low Numbers were inducted, this Esquire GI has popped in and out of our leading magazines. Back in '41 he rode troop trains—in razor-creased wools and a Pershing cap! He later appeared in Guadal, happy, smiling, clean as a boy scout poster. He arrived safely, and none the worse for wear, in North Africa. He showed up in New Guinea, a notoriously messy theater of war, and went so far as to sit near a very small puddle of water.

"Other than that he's seen no Horrors of War. Not him. He just lit up and relaxed. And his cigarets were always dry.

"Maybe he sells cigarets — back in Omaha. But he goes over like a lead balloon with the boys who have seen Guadal, Buna and the north Tunisian coast. And a lot of guys who have been wearing the same socks for a month could cheerfully throttle the copywriters who created him.



with an additional science—
electronics—a phase of our business little known to photographic
icans. After the war, our present experiences in electronics will be reflected in new devices which will
open up entirely new channels of
picture-taking-and-making fun.

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MINIPLY A BOOD A TODAY.

MINIPIX LABORATORIES
P. O. Best 1144 Dept. 310 CHICAGO

"It's time these 'Alice in Wonderland' admen learned, and told the cokeyed world . . . that war . . . is being fought by guys who are dirty, with crawly beards and torn pants. Guys who are too hot or too cold, soaked to the skin or short of water, stinking with sweat. Guys who light up but seldom relax. . . ."

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Every magazine and album is full of these camera-made caricatures of people with their mouths spread and their teeth showing in false parodies of smiles.

Now there is nothing wrong with a smile. A genuine smile or laugh is one of God's gifts to human beings. But when smiles become stereotyped like a Sunday go-to-meeting suit, and people who have never been known to smile in twenty years suddenly blossom out like a Wrigley chewing gum ad the moment a camera appears, something is wrong.

I should like to become the founder of the Realpuss school in photography. To anticipate those critics who will accuse me of indulging in purely destructive criticism, I want to offer a counter-suggestion.

It is this: I will be honest with you, if you will be honest with me. All I ask is that you portray your subjects as they really are, and as you really see them. If all the girls you know go around all day every day with wide, toothy smiles grinning happily at the world, you keep on photographing them that way and I, on the other hand, will agree to go out to the nearest optical store and buy a new pair of warm, rosy-tinted lenses.

If, on the other hand, the girls you know are actual human beings who have bellyaches, boyfriend troubles, moods of elation and depression, happy days, dull days, blue days and constipated days—if, in other words, they are human beings rather than flesh-and-blood versions of a comic strip heroine, why then, you just take the rose-colored lense off your camera.

The same goes for pictures of men, children and other people. If a so-called work of art contradicts and violates the facts, it is rotten, whether done in Denmark, Duluth or Kansas City.

For photography is in danger of becoming a pimp of advertising. Scores of photographers who began their careers with the honest intention to portray what they saw in the way that they saw it have had their aim deflected by the heavy sugar of advertising agencies and fashion magazines so that they are no longer capable of seeing any subject directly or honestly, or even clearly. It has become secondnature for them to twist every picture of a girl into a glamour picture in the manner of Vogue (which pays swell) and every picture of a housewife into an idealized caricature of the type currently used by Kleansall (a high-paying user of glorified kitchen art).

Correction and Enlargement

- The opening article in MINICAM for September, "Only In America," with photographs by Alexander Alland are from his new book "American Counterpoint," published by John Day, 2 West 45th St., New York City. The price is \$3.00. In our September article, the introduction was by Pearl Buck and her material is also from "American Counterpoint." In the book her remarks are considerably extended. The material was published with the permission of the publishers.
- An error appeared in the September Photo Data Clip Sheet on page 69. It was stated that the exposure should be quadrupled when photographing subjects in the open shade, and a basic exposure of 1/50 at f/11 should become 1/200 at f/11, or 1/100 at f/16. This should have read: "A basic exposure of 1/50 at f/11 could become 1/25 at f/8, or 1/50 at f/5.6."



AGFA EXPANDS

Agfa Ansco announced War Production Board approval of the erection of a new \$1,000,000 addition to its film plant in Binghamton, N. Y. Schedules call for the new plant to be in production late next spring.

The addition, 25x450 feet, in three and four story sections, will house a new film coating unit which will materially increase coated production and enable the company to supply still larger quantities of film to the Army and Navy.



Sale

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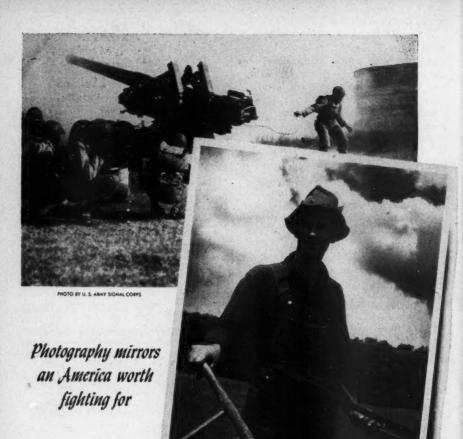
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Tessar F3.5, 16.5 c/m Barrel Mount
Tessar F3.5, 16.5 c/m Sunk Mount
Tessar F3.5, 16.5 c/m Focusing Mount 180.00
Biotar F1.4, 7 c/m Barrel Mount
Tessar F2.7, 5 c/m Focusing Mount, 45.00
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Biotessar F2.8, 13.5 c/m Barrel Mount 170.00
Tessar F3.5, S c/m, Compur shutter 44.72
Tessar F3.5, 7 c/m, Compur Rapid shutter \$3.00
Dagor F7.7, 36 c/m, Compound shutter 421.00
Dagor F9, 12.8 c/m, Compur 91.63
Dagor F9, 15 c/m, Compur 102.00
Dagor F9, 18 c/m, Compur
Proter F7.2, 37 c/m Barrel Mount Proter F12.5, 50 c/m Barrel Mount
Protar F12.5, 50 c/m Barrel Mount }
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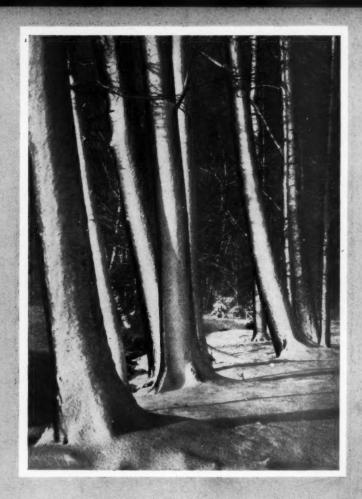
The farmer at his plow . . . the field of freshly turned earth . . . the sky studded with soft spring clouds . . . it was a picture that cried out to be taken. Your camera was loaded with Defender Film and you captured the whole scene . . . to make a picture that won you many compliments.

Each year the farmer looks forward to the season of harvest with the same hope that has shown in the faces of free men for generations... since the first plow began to turn the fertile soil of America. Here men have found refuge from oppression. Here they have found the freedom to hope. Here is the land of opportunity where to each has been given the privilege of reaping the rewards of his own efforts. Here is the Godgiven right for which America fights today.

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